



Ansökan

2025-08-19

2025-07582	Gao, Feng	VR-EXCBT
Information om sökande Projektledare: Feng Gao Födelsedatum: 19810221 Kön: Man Medelsförvaltare: Linköpings universitet Hemvist: Institutionen för fysik, kemi och biologi (IFM)		
Information om ansökan Utlisningsnamn: Bidrag för planering av framtida excellenskluster inom banbrytande tekniker 2025 (Vetenskapsrådet) Bidragsform: Nätverksbidrag Sökt inriktning: Banbrytande tekniker Ämnesområde utlysning: NT, MH, HS, UV		
Projekttitel: Excellenskluster för framtidens solcellsteknik Projektstart: 2025-10-01 Sökt beredningsgrupp: VR-EXCBT Klassificeringskod: 20599. Annan materialteknik, 10403. Materialkemi, 20299. Annan elektroteknik och elektronik Nyckelord: Solar energy, Optoelectronic devices, Power conversion efficiency, Loss mechanisms, Sustainability		
Medverkande		
Medverkande forskare: Magnus Borgström Födelsedatum: 19740826 Kön: Man Land: Sverige		
Dr-examen: 2003-11-26 Akademisk titel: Professor Arbetsgivare: Lunds universitet		
Medverkande forskare: Olof Hjelm Födelsedatum: 19670106 Kön: Man Land: Sverige		
Dr-examen: 1996-04-26 Akademisk titel: Professor Arbetsgivare: Linköpings universitet		
Medverkande forskare: Ellen Moons Födelsedatum: 19660817 Kön: Kvinna Land: Sverige		
Dr-examen: 1995-12-21 Akademisk titel: Professor Arbetsgivare: Karlstads universitet		
Medverkande forskare: Christian Müller Födelsedatum: 19800709 Kön: Man Land: Sverige		
Dr-examen: 2008-11-10 Akademisk titel: Professor Arbetsgivare: Chalmers tekniska högskola		
Medverkande forskare: Charlotte Platzer Björkman Födelsedatum: 19760410 Kön: Kvinna Land: Sverige		
Dr-examen: 2006-03-31 Akademisk titel: Professor Arbetsgivare: Uppsala universitet		

Medverkande forskare: Harald Rohrer

Födelsedatum: 19650224

Kön: Man

Land: Sverige

Dr-examen: 2002-12-03

Akademisk titel: Professor

Arbetsgivare: Linköpings universitet

Projektinformation

Projekttitel (svenska)

Excellenskluster för framtidens solcellsteknik

Projekttitel (engelska)

Swedish Cluster of Excellence on Emerging Photovoltaics

Abstract och populärvetenskaplig beskrivning

Abstract (engelska)

To succeed in limiting the long-term global warming to 1.5 °C, solar energy must expand rapidly in urban and developing regions. Traditional silicon-based solar panels face limitations in efficiency, recyclability, and adaptability to urban environments. Next-generation solar cells are lightweight, flexible, and made of abundant materials, enabling scalable and energy-efficient manufacturing. However, their implementation is currently constrained by major scientific, technical and social challenges. Addressing these challenges requires a multidisciplinary effort spanning materials design, device architecture, environmental assessment, energy systems, and societal integration, all within a coordinated framework.

Despite having several world-leading research groups in next-generation solar cells, Swedish research remains fragmented. A national excellence cluster for future solar technologies is therefore essential to address these interconnected challenges. During the planning phase, we will forge a unified scientific vision, identify gaps in the collective national expertise and infrastructure, and engage key international researchers and industrial connections. We aim to sculpt a strategic roadmap for a Swedish Cluster of Excellence on Emerging Photovoltaics that turns Sweden into a pioneering global leader in next-generation solar energy technologies.

Populärvetenskaplig beskrivning (svenska)

Flera av FNs globala hållbarhetsmål och den nu pågående AI-revolutionen kräver en kraftig utbyggnad av solenergi. Dagens solpaneler baserade på kisel har begränsningar när det gäller bland annat verkningsgrad, återvinning och anpassning till stadsmiljöer. Nästa generations solceller är lätta, flexibla och ofta tillverkade av material baserade på rikligt förekommande grundämnen, vilket möjliggör skalbar och energieffektiv tillverkning. Storskalig introduktion av dessa solcellstekniker begränsas dock för närvarande av stora vetenskapliga, tekniska och sociala utmaningar. För att övervinna dessa krävs en tvärvetenskaplig insats som spänner över materialdesign, enhetsarkitektur, miljöbedömning, energisystem och samhällsintegration, allt inom ett samordnat ramverk.

Trots att Sverige har flera världsledande forskargrupper inom dessa områden så är den nationella forskningsmiljön fortfarande fragmenterad. Ett nationellt excellenskluster för nästa generations solcellsteknik är därför avgörande för att ta itu med dessa sammanlänkade utmaningar. Med hjälp av planeringsbidraget kommer vi att skapa en enhetlig vetenskaplig vision, identifiera luckor i den samlade nationella expertisen och infrastrukturen, engagera viktiga internationella forskare och industriella kontakter, för att skapa en strategisk färdplan för ett svenskt excellenskluster för framtidens solcellsteknik som gör Sverige till en global, banbrytande ledare inom solenergi.

Beräknad projekttid

2025-10-01 - 2026-03-31

Planerad användning av forskningsinfrastruktur

Planerad användning av forskningsinfrastruktur

Ja

Forskningsinfrastruktur/er

MAX IV-laboratoriet

ARTEMI - Nationell Forskningsinfrastruktur för Elektronmikroskopi

Annan forskningsinfrastruktur

Övriga ansökningar och bidrag

Är någon eller flera av punkterna aktuella för dig?

Ja

Motivering och redogörelse för relationen mellan de olika projekten och/eller ansökningarna (engelska)

I have two ongoing VR projects, on normal project and one Consolidator Grant. The proposal is totally different from my ongoing projects, although synergies can be expected.

Planering för användning av bidraget

Planering för användning av bidraget (engelska)

Se nästa sida för bilaga.

Swedish Cluster of Excellence on Emerging Photovoltaics

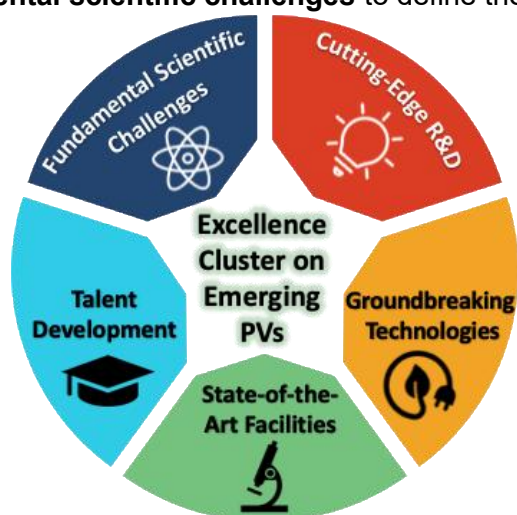
Description of the Research Area

To succeed in limiting the long-term global warming to 1.5 °C, the expansion of renewable energy must accelerate dramatically.¹ **Solar energy**, with its modularity, scalability, and minimal environmental impact, is poised to be a cornerstone of this global climate-neutral ambition. Although foundational, silicon-based photovoltaics (PVs) are limited by their efficiency, adaptability, and integration in space-constrained urban environments. Sweden holds a strong position in multiple emerging PV technologies—including perovskites, organics, nanowires, and chalcogenides—that complement, and in some cases even surpass, silicon by offering higher efficiencies, flexible design, and a broader range of applications.^{2,3}

These next-generation solar technologies are **lightweight, flexible**, and often made of **abundant materials, enabling scalable, low-energy manufacturing**. They can be deployed on unconventional surfaces such as facades, windows, textiles, or portable electronics, and configured as tandem cells to capture a wider spectrum of sunlight.⁴ Their implementation, however, is tempered by major challenges: **interfacial and defect losses; material and device instability** under moisture and heat; difficulties in **scaling lab-scale breakthroughs** to uniform large-area modules.^{5,6} Addressing these challenges require coordinated, multidisciplinary efforts—physicists and device specialists to minimize interfacial losses, materials chemists and nanoscientists to enhance stability, engineers to solve manufacturing scalability, and environmental researchers to ensure safe, sustainable deployment.

Sweden, while home to world-class research groups in these fields, faces a fragmented landscape in its PV research and technology development. Individual efforts cannot tackle the multifaceted challenges of next-generation PV.⁷ **Establishing a Swedish Cluster of Excellence on Emerging PVs is therefore imperative**. By consolidating resources and expertise, it will unify materials design, device architecture, environmental assessment, energy systems research, and societal integration, all within a single coordinated framework. A PV cluster like this provides a crucial opportunity for strategic international recruitment—attracting top talents in niche research, infrastructure design, and cluster management—which is vital for achieving global excellence in PV research and technology.

We have preliminarily identified **five core pillars for the cluster** as the starting point for the planning grant (figure on the right): tackling **fundamental scientific challenges** to define the research focus, advancing **cutting-edge R&D** with innovative approaches like AI-driven discovery and exploring new PV technologies, developing **groundbreaking technologies** for diverse applications, leveraging **state-of-the-art facilities** like stability testbeds, and fostering **talent development** via a graduate school and attracting top researchers. Beyond the technical dimension, the cluster will actively prepare PV technologies for market and policy integration. A robust digital knowledge platform, leveraging AI, will ensure efficient data sharing and prevent duplication. Proactive engagement with policymakers and communities will secure regulatory readiness, enhance societal trust, and align innovation with ethical and environmental standards.



By uniting **fragmented efforts, addressing knowledge gaps and linking science with industry and society**, the Swedish cluster of excellence on emerging PVs will position Sweden at the forefront of global solar innovation—directly supporting its 2045 climate-neutral ambitions and making a tangible contribution to global scale-up of the technology.

Relevance and Expected Contributions of the Cluster

Emerging PV technologies represent a transformative leap beyond conventional silicon PV, offering lightweight, flexible and high-efficiency solutions for building-integrated photovoltaics, agrivoltaics, IoT devices, drones, and even space applications.⁸ Their disruptive potential lies not only in new materials and device architectures but also in their **adaptability to diverse environments and markets**, including off-grid systems in developing nations, e.g. in Africa, Asia, and Latin America, and in crisis-affected areas.⁹

The core driving force for the planned Cluster is to solve the challenges facing next-generation PVs by integrating highly complementary expertise into a single, cohesive research cluster. Our team will jointly **tackle fundamental bottlenecks** such as material stability, charge-carrier dynamics, interfacial engineering, and tandem cell optimization, while advancing standardized life-cycle assessments (LCA) and circularity throughout a product's life cycle, from production to use. These challenges demand cross-disciplinary collaboration spanning materials science, physics, engineering, AI-driven modelling, sustainability assessments and energy systems research. Engaging with local and international PV industries (e.g., Epishine, Exeger, Svea Solar, Oxford PV, First Solar) will expedite the commercialization of next-generation technologies. Simultaneously, collaboration with **international** partners and developing countries is essential to support distributed and sustainable energy transitions.

Beyond technology, the cluster will **foster societal integration** by addressing ethical sourcing, public acceptance, and policy alignment, ensuring impact beyond the lab and the fab. Shared infrastructure—prototyping labs, digital platforms, and AI tools—will accelerate breakthroughs, while graduate training, mobility schemes, and industry placements prepare the next generation of solar researchers.

By catalysing a cohesive national strategy, this cluster is poised to elevate the Technology Readiness Levels (TRL) of next-generation PV technologies. This coordinated hub will establish **Sweden as a pioneering leader in sustainable energy**, directly advancing its climate-related goals while providing a global model for renewable energy transitions and a tangible contribution to the **UN Sustainable Development Goals**.

Network Description and Mode of Cooperation

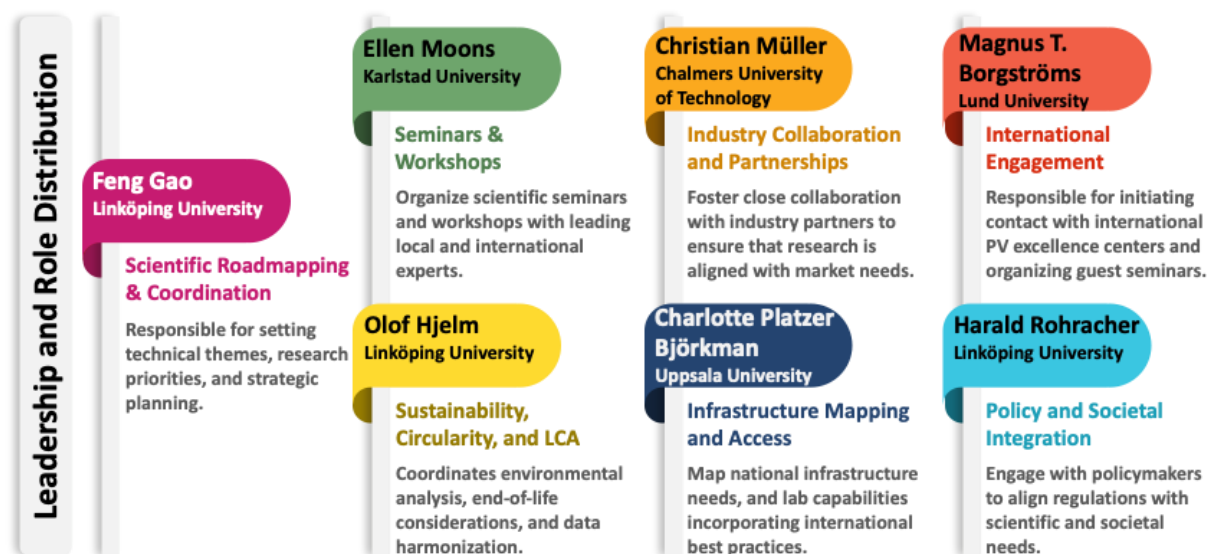
Collaborating Partners and Contributions, including their Complementarity

The Cluster will not only unite Sweden's world-class expertise in emerging PVs but also pioneer cross-disciplinary pathways to tackle problems that no single group can solve alone. For instance, **Feng Gao** (Linköping) will focus on fundamental mechanisms affecting the photovoltaic performance, while **Christian Müller** (Chalmers) addresses long-term stability. **Ellen Moons** (Karlstad) provides expertise in advanced characterization, and **Magnus T. Borgström** (Lund) works on tandem cells. The team also includes experts in scalable development (**Charlotte Platzer Björkman**, Uppsala), life-cycle assessment (**Olof Hjelm**, Linköping), and societal integration (**Harald Rohrer**, Linköping). The core team will engage directly with local and international PV industries, leveraging their insights to ensure the cluster's strategic roadmap for R&D and commercialization is aligned with diverse market needs. This collaborative and interdisciplinary approach will bridge the gaps between fundamental research, industrial scalability, and societal integration, positioning Sweden as a global leader in solar energy.

Leadership and Role Distribution

The leadership of the planning grant **ensures a balanced combination** of strategic vision, technical expertise, and collaborative coordination, inspired by best practices from leading international centers. A **Cluster Planning Steering Committee**, composed of Principal Investigators (PIs) from Linköping, Chalmers, Karlstad, Lund and Uppsala University, will oversee strategic planning and the alignment of research priorities (figure on the next page). The planning is led by Feng Gao at Linköping University, who is responsible for driving

interdisciplinary coordination and aligning the initiative with Sweden's ambitions for global leadership. A part-time administrator, **Karin Bermlid**, will support administrative tasks and help activities such as expertise mapping and stakeholder engagement.



Leadership roles are distributed across the PIs based on their institutional strengths, enabling targeted contributions. During the planning phase, the leadership team will conduct an **extensive mapping of PV-related expertise** across Sweden to identify additional specialists who will strengthen our capacity. During the preparation of the planning proposal, we have already identified relevant top experts willing to contribute to the cluster planning, including **Mats Fahlman**, Linköping (surface and interface physics), **Jonathan J. Scragg**, Uppsala (AI for emerging PVs), **Heiner Linke**, Lund (optical efforts), **Igor Abrikosov**, Linköping (theory on PV materials design), **Ergang Wang**, Chalmers (PV materials development), **Johanna Rosén**, Linköping (charge-transport materials) and **Yuttapoom Puttisong**, Linköping (defect physics). **Björn Sanden**, Chalmers, with deep knowledge on technological innovation systems, will be consulted. We emphasize that during the planning phase we will make an extensive map of Sweden's PV-related excellence and international actors, inviting them to join or get affiliated with the excellence cluster (for both the planning and running of the cluster). This distributed, inclusive, and coordinated framework ensures efficient planning and execution in the short term, while building long-term resilience and institutional synergy.

Forms of collaboration

The cluster's collaborative activities, coordinated by the Cluster Planning Steering Committee and supported by a part-time administrator (Karin Bermlid), are designed as a series of strategic work packages to prepare a world-leading cluster of excellence on emerging PVs. These activities will leverage the expertise of all collaborating universities and partners to address the identified gaps in future solar cells technologies. Through the following activities, we will ensure efficient and timely execution of the planning.

- 1. Expertise Mapping (Months 1–4):** The cluster's initial activity is to create a comprehensive national expertise network. The collaborating researchers will lead the effort to map PV expertise at their respective institutions, identifying key specialists to address gaps in niche areas, infrastructure, and project management by identifying and inviting relevant national experts into the cluster planning. To ensure a world-leading initiative, the team will also engage with **international experts** to bring in global best practices. The outcome will be a detailed map of Swedish PV excellence and a set of gap-specific research priorities, which will serve as the foundation for the cluster's strategic roadmap.
- 2. Coordination of Research Questions (Months 1–6):** This activity will align research priorities with the national expertise mapped in the initial phase. Led by Gao and organized

by Bermlid, monthly virtual meetings will address core challenges in stability, sustainability, and integration, as well as broader issues like standardization and energy storage. The contributions from all collaborating researchers will ensure a unified scientific vision, resulting in a prioritized research agenda that will guide the cluster's future work.

- 3. Joint Seminars and Workshops (Months 2–6):** To align the cluster with global best practices and drive innovation, the team, led by Moons and Borgströms, will organize virtual exchanges, seminars, and workshops. These events will enable rapid sharing of research findings and strategic insights with key international partners, reducing redundant efforts and fostering stronger collaborations. Involving local and global experts from institutions such as Fraunhofer ISE and NREL, the events will tackle critical challenges in emerging photovoltaics, including tandem integration, long-term stability, and AI-driven materials design. By opening select events to industry stakeholders and policymakers, the cluster will promote technology transfer and policy alignment, ensuring priorities are relevant to both scientific advancement and societal needs.
- 4. Needs Assessment of Infrastructure (Months 3–6):** A task force, led by Björkman, with support from Bermlid for site visit logistics, will assess infrastructure needs via site visits and industry consultations. This will help identify gaps in critical equipment like prototyping labs and AI-driven platforms. The outcome will be a comprehensive infrastructure plan aligned with the mapped expertise.
- 5. Industry Engagement (Months 2–6):** Led by Müller, with Bermlid support for scheduling and communication, the cluster will engage Swedish and international PV companies—Epishine, Exeger, Oxford PV—via focus groups and virtual meetings. These discussions will address commercialization barriers, scalability, and grid integration. The insights gained will inform an industry-aligned commercialization strategy for the cluster.
- 6. Stakeholder Engagement (Months 2–6):** Rohracher will coordinate focus groups with policymakers and communities to analyse societal acceptance and grid integration policies. This activity will ensure the integration of humanities perspectives and result in a societal impact assessment that will inform the cluster's final roadmap.

Together, these collaborative efforts will lay the foundation for a nationally integrated, internationally visible excellence center in emerging PV technologies—capable of responding to the scientific, societal, and industrial challenges of the energy transition.

References

- ¹ Intergovernmental Panel on Climate Change. (2018). Special report: Global warming of 1.5°C. Retrieved from <https://www.ipcc.ch/sr15/>
- ² Green, Martin A., et al. "Solar cell efficiency tables (version 62)." *Progress in photovoltaics: research and applications* 31 (2023): 651-663.
- ³ Kant, Neeraj, and Pushpendra Singh. "Review of next generation photovoltaic solar cell technology and comparative materialistic development." *Materials Today: Proceedings* 56 (2022): 3460-3470.
- ⁴ Mdallal, Ayman, et al. "A comprehensive review on solar photovoltaics: Navigating generational shifts, innovations, and sustainability." *Sustainable Horizons* 13 (2025): 100137.
- ⁵ Chen, Lin X. "Organic solar cells: Recent progress and challenges." *ACS Energy Letters* 4.10 (2019): 2537-2539.
- ⁶ Hou, Yi, et al. "A generic interface to reduce the efficiency-stability-cost gap of perovskite solar cells." *Science* 358.6367 (2017): 1192-1197.
- ⁷ Andersson, Johnn, Hans Hellsmark, and Björn Sandén. "Photovoltaics in Sweden—Success or failure?." *Renewable and Sustainable Energy Reviews* 143 (2021): 110894.
- ⁸ Li, Fengzhu, Francis R. Lin, and Alex K-Y. Jen. "Current state and future perspectives of printable organic and perovskite solar cells." *Advanced Materials* 36.17 (2024): 2307161.
- ⁹ IRENA. (2023). Renewable energy solutions for off-grid communities. Retrieved from <https://www.irena.org/publications/2023/Feb/Renewable-energy-solutions-for-off-grid-communities>

Beskrivning av meriter

Meritbeskrivning (engelska)

During the past decade, I have gained extensive experience by successfully leading research organizations and projects. Since 2020, I have been the Head of the Optoelectronics Unit at LiU, overseeing 31 members, including two full professors, three associate professors, and one assistant professor. Under my leadership, the Unit has grown into the largest and one of the most successful units at the University.

In addition, I have been principal investigator and project coordinator in large national and European projects, including two ERC grants, VR Consolidator Grant, Wallenberg Scholar since 2024, and two Wallenberg projects, indicating my extensive experience leading large interdisciplinary efforts. For example, the first Wallenberg project I coordinated totals a budget of 34.5 MSEK, involving 4 PIs and 11 project members. I coordinated the research activities of four research groups and organized networking activities for the project members, resulting in a fruitful project. Additionally, I successfully led (as the chair) the organization of the 15th European Conference on Molecular Electronics in 2019, which had 340 international participants.

Beyond my proven success as a project manager, I have demonstrated the ability to establish a creative research environment. When I started my research group in 2015 at LiU, we were the only group working on non-fullerene organic solar cells at Linköping. I later expanded our research to solution-processed perovskite optoelectronics, where we were also the first at Linköping. Over the past ten years, we have attracted six research groups with complementary expertise to work in these areas. We are now internationally recognized as one of the leading research environments for solution-processed optoelectronic devices, with a strong publication record in high-profile journals. Very recently, we also attracted a promising young scientist from Cambridge to join our environment, funded by the Wallenberg Academy Fellowship.

Sökandes publikationer och andra forskningsoutputs (engelska)

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TOTAL NUMBER OF PUBLICATIONS

No. of publications: **422**

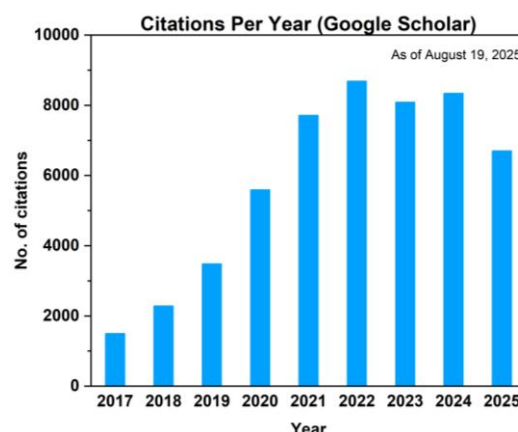
Total no. of citations: **54689**

i10-index: **307**

Clarivate **Highly Cited Researcher** since 2020, Web of Science

The publications include

- 5 in *Nature*
- 4 in *Science*
- 10 in *Nature Energy*
- 6 in *Nature Materials*
- 6 in *Nature Photonics*
- 4 in *Nature Electronics*
- 27 in *Nature Communications*
- 5 in *Science Advances*
- 35 in *Advanced Materials*
- 1 in *Physical Review Letters*
- 5 in *Nano Letters*
- 6 in *Journal of the American Chemical Society*



TEN SELECTED PUBLICATIONS (*corresponding author)

Ten relevant publications for next-generation photovoltaic technologies.

1. X. Xiao, N. Xu, X. Tian, T. Zhang, B. Wang, X. Wang, Y. Xian, C. Lu, X. Ou, Y. Yan, L. Sun, F. You*, **F. Gao***, "Aqueous-based recycling of perovskite photovoltaics", *Nature*, 638, 670–675 (2025)
Contribution: I directed and supervised the project.
Relevance: In this work, we developed a low-cost, green-solvent-based holistic recycling strategy to restore all valuable components of perovskite solar cells (PSCs).
2. R. Zhang, H. Chen, T. Wang, L. Kobera, L. He, Y. Huang, J. Ding, B. Zhang, A. Khasbaatar, S. Nanayakkara, J. Zheng, W. Chen, Y. Diao, S. Abbrent, J. Brus, A.H. Coffey, C. Zhu, H. Liu, X. Lu, Q. Jiang, V. Coropceanu, J.-L. Brédas, Y. Li, Y. Li*, **F. Gao***, "Equally high efficiencies of organic solar cells processed from different solvents reveal key factors for morphology control" *Nature Energy* 10, 124–134 (2025)
Contribution: I directed and supervised the project.
Relevance: In this work, we provided a new understanding on the long-standing question of morphology control and effective guides to design organic solar cells (OSCs) materials towards practical applications.
3. Y. Wang, J. Yu, R. Zhang, J. Yuan, S. Hultmark, C.E. Johnson, N.P. Gallop, B. Siegmund, D. Qian, H. Zhang, Y. Zou, M. Kemerink, A.A. Bakulin, C. Müller, K. Vandewal, X.-K. Chen*, **F. Gao***, "Origins of the open-circuit voltage in ternary organic solar cells and design rules for minimized voltage losses", *Nature Energy*, 8, 978-988 (2023)
Contribution: I directed and supervised the project.
Relevance: To achieve the next level of efficiency, we established new design principles based on current developments in high-efficiency OSCs.
4. L. Wan*, R. Zhang, E. Cho, H. Li, V. Coropceanu, J.-L. Brédas, **F. Gao***, "Sensitive near-infrared circularly polarized light detection via non-fullerene acceptor blends", *Nature Photonics*, 17, 649-655 (2023)
Contribution: I directed and supervised the project.
Relevance: We gave important insights into the morphology of oligomer-based OSCs.

5. T. Zhang, F. Wang,* H.-B. Kim, I.-W. Choi, C. Wang, E. Cho, R. Konefal, Y. Puttisong, K. Terado, L. Kobera, M. Chen, M. Yang, S. Bai, B. Yang, J. Suo, S.-C. Yang, X. Liu, F. Fu, H. Yoshida, W.M. Chen, J. Brus, V. Coropceanu, A. Hagfeldt, J.-L. Brédas, M. Fahlman, D.S. Kim, Z. Hu, **F. Gao***, “Ion-modulated radical doping of spiro-OMeTAD for more efficient and solar cells”, **Science** 377, 495 (2022)
Contribution: I directed and supervised the project.
Relevance: We devised a unique and clean doping technique for spiro-OMeTAD to improve both the efficiency and device stability of PSCs.
6. X. Chen, D. Qian*, Y. Wang, T. Kirchartz, W. Tress, H. Yao, J. Yuan, M. Hulsbeck, M. Zhang, Y. Zou, Y. Sun, Y. Li, J. Hou, O. Inganäs, V. Coropceanu*, J.-L. Bredas*, **F. Gao*** “A unified description of non-radiative voltage losses in organic solar cells”, **Nature Energy** 6, 799 (2021)
Contribution: I directed and supervised the project
Relevance: This study provides a unified description of the non-radiative voltage losses in OSCs.
7. H. Chen, R. Zhang, X. Chen, G. Zeng, L. Kobera, S. Abbrent, B. Zhang, W. Chen, G. Xu, J. Oh, S.Kang, S. Chen, C. Yang, J. Brus, J. Hou, **F. Gao***, Y. Li*, Y. Li, “A guest-assisted molecular-organization approach for > 17% efficiency organic solar cells using environmentally friendly solvents”, **Nature Energy**, 6, 11, 1045 (2021)
Contribution: I developed the ideas and supervised the project together with Y. Li.
Relevance: In this paper, we presented a novel strategy to developing large-area and high-efficiency OSCs using green solvents, clearing the way for industrial development.
8. S. Bai*, P. Da, C. Li, Z. Wang, Z. Yuan, F. Fu, M. Kawecki, X. Liu, N. Sakai, J. T.-W. Wang, S. Huettner, S. Buecheler, M. Fahlman, **F. Gao***, H.J. Snaith*, “Planar perovskite solar cells with long-term stability using ionic liquid additives”, **Nature**, 571, 245 (2019)
Contribution: I developed the ideas and supervised the project together with H.J.S.
Relevance: We showed long-term operational and stable PSCs under extreme conditions, which is a significant step towards reliable perovskite photovoltaic technology.
9. D. Qian, Z. Zheng, H. Yao, W. Tress, T.R. Hopper, S. Chen, S. Li, J. Liu, S. Chen, J. Zhang, X.-K. Liu, B. Gao, L. Ouyang, Y. Jin, G. Pozina, I. Buyanova, W. Chen, O. Inganäs, V. Coropceanu*, J.-L. Bredas, H. Yan, J.H. Hou, F. Zhang, A.A. Bakulin*, **F. Gao***, “Design Rules for Minimizing Voltage Losses in High-Efficiency Organic Solar Cells”, **Nature Materials**, 17, 703 (2018)
Contribution: I developed the ideas and supervised the project.
Relevance: The relevance of open-circuit voltage is hotly debated in the realm of OSCs. In this study, we introduced a new set of principles for designing OSC devices with large output voltages.
10. J. Liu, S.S. Chen, D. Qian, B. Gautam, G.F. Yang, J.B. Zhao, J. Bergqvist, F.L. Zhang, W. Ma, H. Ade, O. Inganäs, K. Gundogdu*, **F. Gao***, H. Yan*, “Fast and efficient charge separation upon a small driving force in a non-fullerene organic solar cell”, **Nature Energy**, 1, 16089 (2016)
Contribution: I developed the ideas and supervised the project together with H.Y.
Relevance: In this work, we reported the first example of effective charge separation utilising advanced photophysics investigations, which has important implications for the development of more efficient OSCs.

RELEVANT PUBLICATIONS (2016—2025) (*corresponding author)

11. R. Huang, L. Yang, F. Yang, Y. Puttisong, Q. Hu, G. Li, J. Hu, Z. Hu, L. Li, J. Tang, W. Chen, Y. Han*, J. Luo*, **F. Gao***, “Spin-polarized self-trapped excitons in low-dimensional cesium copper halide”, **Nature Communications**, 16, 7264 (2025)

12. J. Qin, J. Zhang, X. Liu, Y. Wang, H. Wang, U. Singh, Y. Wang, H. Wang, T. Hu, Y. Zhan, Y. Tang, B. Hu, C. Bach, C. Deibel, W.-X. Ni, S.I. Simak, I.A. Abrikosov, M. Fahlman, **F. Gao***, "Surfactant-induced hole concentration enhancement for highly efficient perovskite light-emitting diodes", *Nature Materials*, 24, 778–784 (2025)
13. M. Zhang, X. Ma, J.L. Esguerra, H. Yu, O. Hjelm, J. Li*, **F. Gao***, "Towards sustainable perovskite light-emitting diodes", *Nature Sustainability*, 8, 315–324 (2025)
14. Z. Li, Q. Wei, Y. Wang, C. Tao, Y. Zou, X. Liu, Z. Li, Z. Wu, M. Li*, W. Guo*, G. Li*, W. Xu*, **F. Gao***, "Highly bright perovskite light-emitting diodes enabled by retarded Auger recombination", *Nature Communications*, 16, 927 (2025)
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6. "Record 1.1 V open-circuit voltage for Cu₂ZnGeS₄-based thin film solar cells using atomic layer deposition Zn_{1-x}Sn_xO_y buffer layers", N. Saini, N. Martin, J. Larsen, A. Hultqvist, T. Törndahl, **C. Platzer-Björkman**, Solar RRL 6(2) doi: 10.1002/solr.202100837 (2022)
7. "Long term stability and recovery of 3 MeV proton irradiated Cu(In,Ga)Se₂ and Cu₂ZnSn(S,Se)₄ thin film solar cells" P. Pearson, J. Keller, J. Larsen, V. Kosyak, **C. Platzer-Björkman**, Thin Solid Films 741 (2022) doi: 10.1016/j.tsf.2021.139023
8. "Cadmium free Cu₂ZnSnS₄ solar cells with 9.7% efficiency", J. Larsen, F. Larsson, T. Törndahl, N. Saini, L. Riekehr, Y. Ren, A. Biswal, D. Hauschild, L. Weinhardt, C. Heske, **C. Platzer-Björkman**, Advanced Energy Materials, 9:21 (2019) 1900439
9. "Ga-grading and solar cell capacitance simulation of an industrial Cu(In,Ga)Se₂ solar cell produced by an in-line vacuum, all-sputtering process", P. Bras, C. Frisk, A. Tempez, E. Niemi and **C. Platzer-Björkman**, Thin Solid Films 636 367-374 (2017)
10. "Optical properties of Cu₂ZnSn(S_xSe_{1-x})₄ solar absorbers: spectroscopic ellipsometry and ab initio calculations", S. Li, S. Zamulko, C. Persson, N. Ross, J. Larsen, **C. Platzer-Björkman**, Applied Physics Letters 110 (2) 021905 (2017)

List of 10 publications

1. **Rohrer**, H., Velkova, J., Magnusson, D., Farhangi, M., 2025. Re-assembling infrastructures from below. The agency of households in the sustainable energy transition. *Environmental Innovation and Societal Transitions* 54, 100943, <https://doi.org/10.1016/j.eist.2024.100943>
2. Karvonen, A., Bruggeman, D., Magnusson, D., Ornetzeder, M., **Rohrer**, H., 2025. Heterogeneous energy infrastructures in Europe: layering and orchestrating Positive Energy Districts. *Sustainability Science*, online first, <https://doi.org/10.1007/s11625-025-01676-w>.
3. **Rohrer**, H., Ornetzeder, M.: Navigating missions: Experiences from a long-term R&I programme to transform the building sector in Austria. In: *Science and Public Policy* 51(1), 2024, pp. 67–79, <https://doi.org/10.1093/scipol/scad055>
4. Wieczorek, A.J., **Rohrer**, H., Bauknecht, D., Kubeczko, K., Bolwig, S., Valkering, P., Belhomme, R., Maggiore, S.: Citizen-led decentralised energy futures: Emerging rationales of energy system organisation. *Energy Research & Social Science* 113, 2024, 103557, <https://doi.org/10.1016/j.erss.2024.103557>
5. **Rohrer**, H.; Coenen, L., Kordas, O.: Mission incomplete: Layered practices of monitoring and evaluation in Swedish transformative innovation policy. In: *Science and Public Policy* 50(2), 2023, pp. 336-349, DOI: 10.1093/scipol/scac071
6. Truffer, B., **Rohrer**, H., Kivimaa, P., Raven, R., Alkemade, F., Carvalho, L., Feola, G.: A perspective on the future of sustainability transitions research. In: *Environmental Innovation and Societal Transitions* 42, 2022, pp. 331-339; DOI: <https://doi.org/10.1016/j.eist.2022.01.006>
7. **Rohrer**, H.: Analyzing the Socio-Technical Transformation of Energy Systems: The Concept of 'Sustainability Transitions'. In: Gross M and Davidson D (eds) *Oxford Handbook of Energy and Society*. Oxford: Oxford University Press, 2018, pp. 45-60, ISBN: 9780190633851
8. **Rohrer**, H., Späth, P.: The interplay of urban energy policy and socio-technical transitions: The eco-cities of Graz and Freiburg in retrospect. In: *Urban Studies* 51(7), 2014, pp. 1413-29
9. Weber, M., **Rohrer**, H.: Legitimizing research, technology and innovation policies for transformative change: Combining insights from innovation systems and multi-level perspective in a comprehensive 'failures' framework. In: *Research Policy* 41(6), 2012, pp. 1037-47, DOI: 10.1016/j.respol.2011.10.015
10. **Rohrer**, H.: Energy systems in transition: contributions from social sciences. In: *International Journal of Environmental Technology and Management* 9 (2/3), 2008, pp. 144-161, <https://doi.org/10.1504/IJETM.2008.019026>

Motivering av sökt budget

Motivering av sökt budget (engelska)

Salary for the administrator: We will pay a part-time administrator, Karin Bermlid (50% for 6 months) to support administrative tasks and activities such as expertise mapping and stakeholder engagement. (cost estimation: 150 000 SEK)

Salary for applicants: For the main applicant and co-applicants to contribute to the planning grant and write the final report. (cost estimation: 280 000 SEK)

Kick-off meeting: we plan a kick-off meeting at Linköping in mid October, where we will discuss the details for the planning and specificity roles according to the proposal. (cost estimation: 20 000 SEK)

Workshops and seminars: In order to forge a unified scientific vision, identify gaps in the collective national expertise and infrastructure, identify key international researchers and industrial connections, workshops and seminars will be organized during the planning grant. The cost for venues, travelling, accommodation of all the participants will be covered. We will also invite top **international** experts on emerging PVs to join us, so that we can obtain their advice on our planning of the Cluster of Excellence. (Two workshops and three seminars are planned, with cost estimation: 200 000 SEK)

Lab visits: In order to facilitate knowledge exchange and assessment of infrastructure, lab visits will be arranged during the planning grant. In addition, visits to international photovoltaic organizations (such as Fraunhofer ISE and NREL) are also planned, so that we can gain inspirations from successful institutes and also hopefully build partnerships with these organizations (Five lab visits are planned, with cost estimation: 150 000 SEK)

Industry and stakeholder dialogue: In order to bridge the gap between fundamental research and practical applications as well as societal acceptance, meetings will be organized with industry and different stakeholders. (cost estimation: 50 000 SEK)

Indirect cost at LiU is estimated to be 350 000 SEK.

CV

CV - Feng Gao

Projektleddare: Feng Gao
Födelsedatum: 19810221
Kön: Man
Land: Sverige

Dr-examen: 2011-11-26
Akademisk titel: Professor
Arbetsgivare: Linköpings universitet

Doktorsexamen

Examen	Organisation	Avhandlingens titel (originalspråk)	Handledare
10304. Den kondenserade materiens fysik, 2011-11-26	University of Cambridge, Cavendish Laboratory	Loss mechanisms in bulk heterojunction organic photovoltaics	Neil Greenham

Utbildning

Forskarutbildning			
Examen	Organisation	Avhandlingens titel	Namn på handledare
Doktorsexamen, 10304. Den kondenserade materiens fysik, 2011-11-26	University of Cambridge, Storbritannien och Nordirland, Cavendish Laboratory	Loss mechanisms in bulk heterojunction organic photovoltaics	Neil Greenham

Utbildning på grund- och avancerad nivå

År	Examen
2007	10304. Den kondenserade materiens fysik, Magisterexamen, Nanjing University, Kina
2004	10304. Den kondenserade materiens fysik, Kandidatexamen, Nanjing University, Kina

Arbetsliv

Anställningar			
Period	Anställning	Del av forskning i anställningen (%)	Arbetsgivare
mars 2020 - Nuvarande	Professor, Tillsvdareanställning	100	Linköpings universitet, Sverige, Institutionen för fysik, kemi och biologi (IFM)
oktober 2017 - februari 2020	Lektor, Tillsvdareanställning	100	Linköpings universitet, Sverige, Institutionen för fysik, kemi och biologi (IFM)
april 2015 - september 2017	Biträdande lektor, Vikariat	100	Linköpings universitet, Sverige, Institutionen för fysik, kemi och biologi (IFM)

Postdoktorvistelser		
Period	Organisation	Ämne
februari 2012 - mars 2015	Linköpings universitet, Sverige, Institutionen för fysik, kemi och biologi (IFM)	10399. Annan fysik

Forskarutbyten			
Period	Typ	Organisation	Ämne

Period	Typ	Organisation	Ämne
maj 2015 - maj 2017	Senior visiting scientist	University of Oxford, Storbritannien och Nordirland, Department of Physics	10304. Den kondenserade materiens fysik

Meriter och utmärkelser

Docentur		
År	Ämne	Organisation
2016	103. Fysik	Linköpings universitet, Sverige, Institutionen för fysik, kemi och biologi (IFM)

Handledda personer			
År	Handledda personer	Lärosäte (handledd person)	Roll
2027	Doktorand, Anna Lang	Linköpings universitet, Sverige, Institutionen för fysik, kemi och biologi (IFM)	Huvudhandledare
2027	Doktorand, Daniel Rammer	Linköpings universitet, Sverige, Institutionen för fysik, kemi och biologi (IFM)	Huvudhandledare
2026	Doktorand, David Hardy	Linköpings universitet, Sverige	Huvudhandledare
2026	Doktorand, Julia Morat	Linköpings universitet, Sverige	Huvudhandledare
2026	Doktorand, Yu Wang	Linköpings universitet, Sverige	Huvudhandledare
2025	Doktorand, Gulzada Beket	Linköpings universitet, Sverige, Institutionen för fysik, kemi och biologi (IFM)	Huvudhandledare
2022	Doktorand, Max Karlsson	Linköpings universitet, Sverige, Institutionen för fysik, kemi och biologi (IFM)	Huvudhandledare
2022	Doktorand, Weidong Cai	Linköpings universitet, Sverige, Institutionen för fysik, kemi och biologi (IFM)	Huvudhandledare
2021	Doktorand, Chaoyang Kuang	Linköpings universitet, Sverige, Institutionen för fysik, kemi och biologi (IFM)	Huvudhandledare
2020	Doktorand, Heyong Wang	Linköpings universitet, Sverige, Institutionen för fysik, kemi och biologi (IFM)	Huvudhandledare
2020	Doktorand, Hongling Yu	Linköpings universitet, Sverige, Institutionen för fysik, kemi och biologi (IFM)	Huvudhandledare
2019	Doktorand, Zhongcheng Yuan	Linköpings universitet, Sverige, Institutionen för fysik, kemi och biologi (IFM)	Huvudhandledare
2021	Doktorand, Tanvi Upreti	Linköpings universitet, Sverige, Institutionen för fysik, kemi och biologi (IFM)	Bihandledare
2026	Postdok, Nakul Jain	Linköpings universitet, Sverige	Huvudhandledare
2025	Postdok, Lingewaran Arunagiri	Linköpings universitet, Sverige	Huvudhandledare
2024	Postdok, Tiankai Zhang	Linköpings universitet, Sverige	Huvudhandledare

År	Handledda personer	Lärosäte (handledd person)	Roll
2023	Postdok, Chunyang Yin	Linköpings universitet, Sverige, Institutionen för fysik, kemi och biologi (IFM)	Huvudhandledare
2022	Postdok, Naresh Kumar Kumawat	Linköpings universitet, Sverige, Institutionen för fysik, kemi och biologi (IFM)	Huvudhandledare
2021	Postdok, Weidong Xu	Linköpings universitet, Sverige, Institutionen för fysik, kemi och biologi (IFM)	Huvudhandledare
2020	Postdok, Ignas Nevinskas	Linköpings universitet, Sverige, Institutionen för fysik, kemi och biologi (IFM)	Huvudhandledare

Bidrag erhållna i konkurrens					
Period	Finansiär	Projektledare	Din roll	Delbelopp (kr)	Totalt belopp (kr)
2025 - 2029	VR - Vetenskapsrådet, Sverige - Annan forskningsfinansiär	Feng Gao	Projektledare	0	8 000 000
2025 - 2030	Knut och Alice Wallenbergs Stiftelse, Sverige - Annan forskningsfinansiär	Feng Gao	Projektledare	0	31 500 000
2025 - 2028	Knut och Alice Wallenbergs Stiftelse, Sverige - Annan forskningsfinansiär	Feng Gao	Projektledare	0	4 000 000
2024 - 2029	Knut och Alice Wallenbergs Stiftelse, Sverige - Annan forskningsfinansiär	Feng Gao	Projektledare	0	20 000 000
2023 - 2026	Europeiska Unionen (EU),	Ioannis Karatasios	Medverkande	2 500 000	43 000 000
2023 - 2027	Swedish Energy Agency, Sverige - Övriga statliga myndigheter	Feng Gao	Projektledare	0	5 000 000
2023 - 2026	VR - Vetenskapsrådet, Sverige - Annan forskningsfinansiär	Feng Gao	Projektledare	0	4 000 000
2022 - 2027	Swedish Government Strategic Research Area in Materials Science on Functional Materials at Linköping University., Sverige - Universitet och högskolor	Feng Gao	Projektledare	0	6 600 000
2022 - 2027	Europeiska Unionen (EU),	Feng Gao	Projektledare	0	2 000 000

Priser och utmärkelser				
År	Land	Namn på priset/utmärkelsen	Utfärdare	Beskrivning
2025	Sverige	Göran Gustafsson Prize in Physics	The Royal Swedish Academy of Sciences	

År	Land	Namn på priset/utmärkelsen	Utfärdare	Beskrivning
2025	USA	AI for Sustainability (AI4S) Visiting Professor	Cornell University	
2025	Kina	William Mong Distinguished Lecture	The University of Hong Kong	
2024	Sverige	Wallenberg Scholar	Knut och Alice Wallenbergs Stiftelse	
2022	Sverige	ERC Consolidator Grant	European Commission	
2020	Sverige	SSF Future Researcher Leader	Stiftelsen för Strategisk Forskning	
2020	Sverige	Tage Erlander Prize	The Royal Swedish Academy of Sciences	
2018	Sverige	Wallenberg Academy Fellow	Knut och Alice Wallenbergs Stiftelse	
2017	Sverige	ERC Starting Grant	European Commission	

Andra meriter		
Period	Typ av merit	Beskrivning
2025 - 2030	Coordinator	Coordinator, Wallenberg research project with high scientific potential on organic X-ray detectors
2025 - 2028	Steering group member	Steering group member of Swedish NMR Centre
2010 - 2025	Reviewer for funding agencies	Frequent proposal evaluator for funding agencies, including ERC (ERC Advanced/ Consolidator/ Starting Grant), United States Department of Energy (DOE), the Swiss National Science Foundation (SNSF), the Dutch Research Council (NWO), Research Foundation – Flanders (DWO), German Research Foundation (DFG), Israel Ministry of Science & Technology, Czech Science Foundation, National Science Center of Poland, the Royal Society (UK), the Spanish State Research Agency, National Natural Science Foundation of China, etc.
2010 - 2025	Invited seminars	Over 50 invited seminars in American, European and Chinese universities and research institutions, including Princeton University, University of Oxford, etc.
2010 - 2025	Reviewer for scientific journals	Frequent reviewer for scientific journals, including Springer Nature (e.g. Nature, Nature Phys./Photonics/Mater./ Nano./Energy/Electron./Commun.), AAAS (e.g. Science, Science Adv.) Wiley (e.g. Adv. Mater., Adv. Energy/Funct. Mater.), RSC (e.g. Energy Environ. Sci., J. of Mater. Chem. A/C), ACS (e.g. JACS, Nano Lett., ACS Nano), Elsevier (e.g. Joule, Matter.), AIP (e.g. Appl. Phys. Lett.), IOP (e.g. Rep. Prog. Phys.) etc.
2010 - 2025	Invited talks	Over 50 invited talks or chair roles at in national and international meetings, including MRS meetings, EMRS meetings, Wallenberg Jubilee Symposium, Gordon Research Conference, Celsius-Linnaeus Lecturers, Nature Nanotechnology 15th anniversary symposium, etc.
2006 - 2025	Bibliometric summary	Over 300 publications in high-profile journals, including Science (4), Nature (3) Nature Materials (5), Nature Photonics (6), Nature Energy (8), Nature Electronics (4), Nature Sustainability, Nature Communications (21), Physical Review Letters, Advanced Materials (25), Nano Letters (5). These publications have attracted over 40,000 citations with a h-index of 110 and i10-index of 307.
2020 - 2025	Coordinator	Coordinator, Wallenberg research project with high scientific potential on lead-free perovskite alloys

Period	Typ av merit	Beskrivning
2015 - 2025	PhD opponent/committee	Opponent/ examination committee/ reviewer for PhD defence at Technical University of Denmark, Uppsala University, Swansea University, Stockholm University, Linköping University, Free University of Berlin, Victoria University of Wellington, Friedrich Alexander Universität Erlangen Nürnberg, University of Groningen, KU Leuven, Eindhoven University of Technology, Okinawa Institute of Science and Technology (OIST), etc.
2018 - 2025	External reviewer for faculty promotion	External reviewer for faculty promotion at Hasselt University, KAUST & City University of Hong Kong
2016 - 2025	Guest (co)editor	Focus Issue on Light Emission in Perovskites for JPhys Photonics (IOP); Special Issue on Perovskite Optoelectronics for EcoMat (Wiley); Special Issue on Emerging Materials for Optoelectronics (Chemical Reviews); Special Issues on Organic Solar Cells for Adv. Energy Mater. (2018 and 2025)
2015 - 2025	Conference organiser	Organising over 10 conference symposia, including E-MRS, ECME, HOPV
2019 - 2025	Member of the steering committee	European Conference on Molecular Electronics
2015 - 2025	Leadership training	2016: EMBO Laboratory Management Course for Group Leaders, Heidelberg, Germany; 2015-2017: VR; 2020-2025: SSF
2021 - 2025	Co-funder	LinXole AB, a startup focusing energy materials
2021 - 2025	Highly Cited Researcher	Clarivate Highly Cited Researcher
2025 - 2025	ERC panel member	ERC Consolidator Grant panel member
2020 - 2025	Head of the Optoelectronics Unit	Head of the Optoelectronics Unit (currently around thirty members), including two professors, three associate professors, and one assistant professor.
2022 - 2023	Member of the organising committee	Nobel symposium 2023 (Physics and Chemistry), Nobel Foundation
2012 - 2012	Patent license	PCT patent PCT/GB2011/052503 licensed to Cambridge Display Technology, UK

Immaterialrätt

Immaterialrätt					
Typ	Datum för beviljning	Status	ID	Licensierad till annan	Produkt klassificering
Patent	2021-04-27	Beviljad	SE 543632	Nej	20. Kemikalier och kemiska produkter
Patent	2020-06-04	Beviljad	WO2020109787A1	Nej	20. Kemikalier och kemiska produkter
Patent	2012-06-21	Beviljad	WO2012080750A1	Ej Sverige - Företag	20. Kemikalier och kemiska produkter

CV - Magnus Borgström

Medverkande forskare: Magnus Borgström
Födelsedatum: 19740826
Kön: Man
Land: Sverige

Dr-examen: 2003-11-28
Akademisk titel: Professor
Arbetsgivare: Lunds universitet

Utbildning

Forskarutbildning			
Examen	Organisation	Avhandlingens titel	Namn på handledare
Doktorsexamen, 10399. Annan fysik, 2003-12-08	Lunds universitet, Sverige	Epitaxial Growth, Processing and Characterization of Semiconductor Nanostructures, 110 poäng	Werner Seifert

Utbildning på grund- och avancerad nivå	
År	Examen
2004	10199. Annan matematik, Högskoleexamen, Malmö universitet, Sverige
1999	10304. Den kondenserade materiens fysik, Magisterexamen, Lunds universitet, Sverige

Arbetsliv

Anställningar			
Period	Anställning	Del av forskning i anställningen (%)	Arbetsgivare
mars 2016 - Nuvarande	Professor	65	Lunds universitet, Sverige, Fysiska institutionen 107131
juni 2012 - februari 2016	Lektor	60	Lunds universitet, Sverige, Fysiska institutionen 107131
mars 2009 - maj 2012	Forskarassistent	60	Lunds universitet, Sverige, Fysiska institutionen 107131
september 2007 - mars 2009	Forskare	75	Lunds universitet, Sverige, Fysiska institutionen 107131

Postdoktorvistelser		
Period	Organisation	Ämne
september 2005 - augusti 2007	Philips Research Laboratories, Nederländerna, System on chip	21002. Nanoteknisk elektronik
augusti 2004 - augusti 2005	Eidgenössische Technische Hochschule Zürich, Schweiz, Quantum electronics group	10304. Den kondenserade materiens fysik

Forskarutbyten			
Period	Typ	Organisation	Ämne
mars 2002 - augusti 2002	Gästforskare	Pontificia Universidade Catolica, Rio de Janeiro, Brasilien, Labsem	21003. Nanoteknisk materialvetenskap

Uppehåll i forskningen	
Period	Beskrivning
2013-11-01 - 2014-04-20	Paternal leave
2012-11-15 - 2012-11-28	Paternal leave
2011-12-07 - 2012-01-06	Paternal leave
2009-01-05 - 2009-01-11	Paternal leave
2008-12-15 - 2008-12-18	Paternal leave

Meriter och utmärkelser

Docentur		
År	Ämne	Organisation
2010	210. Nanoteknik	Lunds universitet, Sverige, Fysiska institutionen 107131

Handledda personer			
År	Handledda personer	Lärosäte (handledd person)	Roll
2024	Doktorand, David Alcer	Lunds universitet, Sverige, Fysiska institutionen 107131	Huvudhandledare
2022	Doktorand, Lukas Hrachowina	Lunds universitet, Sverige, Fysiska institutionen 107131	Huvudhandledare
2018	Doktorand, Gaute Otnes	Lunds universitet, Sverige	Huvudhandledare
2018	Doktorand, Vilgaile Dagyte	Lunds universitet, Sverige	Huvudhandledare
2018	Doktorand, Xulu Zeng	Lunds universitet, Sverige	Huvudhandledare
2016	Doktorand, Alexander Berg	Lunds universitet, Sverige	Huvudhandledare
2015	Doktorand, Renato Mourao	Universidade Federal do Rio de Janeiro, Brasilien	Huvudhandledare
2013	Doktorand, Jesper Wallentin	Lunds universitet, Sverige	Huvudhandledare
2020	Doktorand, Mohammad Karimi	Högskolan i Halmstad, Sverige	Bihandledare
2019	Doktorand, Reza Jafari Jam	Högskolan i Halmstad, Sverige	Bihandledare
2018	Doktorand, Olof Hultin	Lunds universitet, Sverige	Bihandledare
2017	Doktorand, Karl Adolphsson	Lunds universitet, Sverige	Bihandledare
2015	Doktorand, Magnus Heurlin	Lunds universitet, Sverige	Bihandledare
2015	Doktorand, Tuomas Haggren	Aalto-korkeakoulusäätiö, Finland	Bihandledare
2019	Postdok, Enrique Barrigon	Lunds universitet, Sverige, Fysiska institutionen 107131	Huvudhandledare
2019	Postdok, Yuwei Zhang	Lunds universitet, Sverige, Fysiska institutionen 107131	Huvudhandledare
2016	Postdok, Magnus Heurlin	Lunds universitet, Sverige, Fysiska institutionen 107131	Huvudhandledare
2017	Gästpostdok, Pyry Kivisaari	Lunds universitet, Sverige	Huvudhandledare

Bidrag erhållna i konkurrens					
Period	Finansiär	Projektledare	Din roll	Delbelopp (kr)	Totalt belopp (kr)
2024 - 2028	Europeiska Unionen (EU),	Magnus T Borgström	Projektledare	0	39 986 225
2024 - 2029	Vinnova, Sverige - Branschforskningsinstitut (forskningsinstitut som bygger upp, förädlar och förmedlar behovsmotiverad FoU inom en viss bransch)	Lars-Erik Wernersson	Medverkande	6 750 000	36 000 000
2024 - 2026	Olle Engkvists stiftelse, Sverige - Övriga privata utförare	Magnus T Borgström	Projektledare	0	2 000 000
2024 - 2027	VR - Vetenskapsrådet, Sverige - Annan forskningsfinansiär	Magnus Borgström	Projektledare	0	3 680 000

Period	Finansiär	Projektledare	Din roll	Delbelopp (kr)	Totalt belopp (kr)
2019 - 2023	Energimyndigheten, Sverige - Annan forskningsfinansiär	Magnus Borgström	Projektledare	0	4 962 000
2016 - 2019	VR - Vetenskapsrådet, Sverige - Annan forskningsfinansiär	Magnus Borgström		0	6 400 000
2015 - 2018	Europeiska Unionen (EU),	Lars Samuelson	Projektledare	0	35 693 920
2013 - 2015	VR - Vetenskapsrådet, Sverige - Annan forskningsfinansiär	Magnus Borgström	Projektledare	0	2 031 000
2013 - 2016	Energimyndigheten, Sverige - Annan forskningsfinansiär	Magnus Borgström	Projektledare	0	9 664 000
2008 - 2012	Europeiska Unionen (EU),	Knut Deppert	Medverkande	4 000 000	32 250 000

Priser och utmärkelser				
År	Land	Namn på priset/utmärkelsen	Utfärdare	Beskrivning
2021	Sverige	Framtidens innovationer	Lunds Universitet och sparbanken skåne.	Transparenta solceller för solenergi via fönsterrutor.
2012	Sverige	Stipendium	Stiftelsen Konung Carl XVI Gustafs 50-årsfond för vetenskap, teknik och miljö	Forskningsbidrag ifrån stiftelsen, rörande utveckling av nano imprint litografi.

Andra meriter		
Period	Typ av merit	Beskrivning
2016 - 2027	National Representatives for the IUVSTA Nanometers Structure Division	Swedish Representative for the IUVSTA Nanometers Structure Division
2000 - 2025	Referee	Nature Communications, Nano Letters, Applied Physics Letters, Journal of Crystal Growth, Nanotechnology, ACS nano,
2007 - 2025	Evaluator PhD defense	8 times external examiner for PhD theses; 11 times committee member PhD Theses
2023 - 2025	Biträdande koordinator för "semiconductor technology" inom NanoLund	Koordinerar området tillsammans med Erik Lind (EIT Lund, LTH)
2004 - 2024	Invited talks	70 in international conferences out of which two plenary
2017 - 2023	Member of the physics board,	Member of the board of the physics department, Lund University
2012 - 2022	Biträdande Programledare Nanoteknikprogrammet LTH	Assistant director of the Master of Science in Engineering programme; Engineering Nanoscience, 5 years, 300 ECTS Credits

Period	Typ av merit	Beskrivning
2016 - 2022	Koordinator för nanoenergiområdet inom Nano Lund	Coordinator for Nano Energy within Nano Lund (previously nanometer structure consortium).
2014 - 2018	Member, PhD4Energy Executive Board	Member, PhD4Energy Executive Board, Single-site IDP funded by EC "People" program 2014-2018.
2010 - 2015	Biträdande koordinator nanoenergiområdet inom nanometerstrukturkonsortiet	Assistant coordinator for nano energy within the nanometer structure consortium.
2010 - 2010	Member, Swedish research council: board evaluation group	NT-Q 2010

Immaterialrätt

Immaterialrätt					
Typ	Datum för beviljning	Status	ID	Licensierad till annan	Produkt klassificering
Patent	2006-01-26	Beviljad	US2006019470	Nej	08. Andra produkter från utvinning av mineral

CV - Olof Hjelm

Medverkande forskare: Olof Hjelm
Födelsedatum: 19670106
Kön: Man
Land: Sverige

Dr-examen: 1996-04-26
Akademisk titel: Professor
Arbetsgivare: Linköpings universitet

Utbildning

Forskarutbildning			
Examen	Organisation	Avhandlingens titel	Namn på handledare
Doktorsexamen, 10599. Annan geovetenskap, 1996-04-26	Linköpings universitet, Sverige, Institutionen för tema (TEMA)	Organohalogens in coniferous forest soil	Gunilla Öberg

Arbetsliv

Anställningar			
Period	Anställning	Del av forskning i anställningen (%)	Arbetsgivare
januari 2012 - Nuvarande	Professor, Tillsvdareanställning	50	Linköpings universitet, Sverige, Instituionen för ekonomisk och industriell utveckling (IEI)

Meriter och utmärkelser

Docentur		
År	Ämne	Organisation
2005	211. Annan teknik	Linköpings universitet, Sverige, Instituionen för ekonomisk och industriell utveckling (IEI)

Handledda personer				
År	Handledda personer	Lärosäte (handledd person)	Roll	Antal
	Student	Linköpings universitet, Sverige, Instituionen för ekonomisk och industriell utveckling (IEI)	Huvudhandledare	200
2026	Doktorand, Karl Eldebo		Huvudhandledare	
2024	Doktorand, Richard Almgren		Huvudhandledare	
2017	Doktorand, Sofia Päivärinne	Linköpings universitet, Sverige, Instituionen för ekonomisk och industriell utveckling (IEI)	Huvudhandledare	
2017	Doktorand, Wisdom Kanda	Linköpings universitet, Sverige, Instituionen för ekonomisk och industriell utveckling (IEI)	Huvudhandledare	
2009	Doktorand, Jenny Ivner	Linköpings universitet, Sverige, Instituionen för ekonomisk och industriell utveckling (IEI)	Huvudhandledare	
2005	Doktorand, Sara Emilsson	Linköpings universitet, Sverige, Instituionen för ekonomisk och industriell utveckling (IEI)	Huvudhandledare	
2003	Doktorand, Jonas Ammenberg	Linköpings universitet, Sverige, Instituionen för ekonomisk och industriell utveckling (IEI)	Huvudhandledare	
2025	Doktorand, Hanna Zanatta		Bihandledare	
2024	Doktorand, Qian Yun		Bihandledare	
2016	Doktorand, Paul Fenton	Linköpings universitet, Sverige, Instituionen för ekonomisk och industriell utveckling (IEI)	Bihandledare	
2015	Doktorand, Santiago Mejia Dugand	Linköpings universitet, Sverige, Instituionen för ekonomisk och industriell utveckling (IEI)	Bihandledare	
2008	Licentiat, Janni Nilsson	Linköpings universitet, Sverige, Instituionen för ekonomisk och industriell utveckling (IEI)	Huvudhandledare	

Bidrag erhållna i konkurrens					
Period	Finansiär	Projektledare	Din roll	Delbelopp (kr)	Totalt belopp (kr)
2024 - 2029	Marianne och Marcus Wallenbergs stiftelse, Sverige - Annan forskningsfinansiär	Olof Hjelm	Projektledare	0	9 900 000
2022 - 2024	Europeiska Unionen (EU),	Klaus Fichter	Medverkande	4 000 000	4 000 000

Period	Finansiär	Projektledare	Din roll	Delbelopp (kr)	Totalt belopp (kr)
2022 - 2024	VINNOVA - Verket för innovationssystem, Sverige - Annan forskningsfinansiär	Agneta Halvarsson Lundkvist	Medverkande	3 000 000	3 000 000
2022 - 2024	Familjen Kamprads stiftelse, Sverige - Övriga privata utförare	Anna Öhrwall Rönnbäck	Medverkande	1 150 000	2 300 000
2018 - 2022	Europeiska Unionen (EU),	Klaus Fichter	Medverkande	0	2 200 000
2015 - 2016	Energimyndigheten, Sverige - Annan forskningsfinansiär	Olof Hjelm	Projektledare	0	1 900 000
2013 - 2015	VINNOVA - Verket för innovationssystem, Sverige - Annan forskningsfinansiär	Olof Hjelm	Projektledare	0	1 800 000

Andra meriter

Period	Typ av merit	Beskrivning
2009 - 2023	Avdelningschef	Chef för avdelningen för Industriell miljöteknik, Linköpings universitet. Under min tid har verksamheten tredubblats avseende extern finansiering, grundutbildning och personal. ca 50 personer inklusive doktorander arbetar nu på avdelningen.

CV - Ellen Moons

Medverkande forskare: Ellen Moons
Födelsedatum: 19660817
Kön: Kvinna
Land: Sverige

Dr-examen: 1995-12-21
Akademisk titel: Professor
Arbetsgivare: Karlstads universitet

Utbildning

Forskarutbildning			
Examen	Organisation	Avhandlingens titel	Namn på handledare
Doktorsexamen, 10799. Annan naturvetenskap, 1995-12-21	Weizmann Institute of Science, Israel, Department of Materials and Interfaces	Linking the Interfacial Chemistry and Physics of CuInSe ₂ - and CdTe-based Photovoltaic Cells and Diodes	David Cahen

Utbildning på grund- och avancerad nivå

År	Examen
1989	10399. Annan fysik, Lärarexamen, Universiteit Gent, Belgien
1989	10304. Den kondenserade materiens fysik, Magisterexamen, Universiteit Gent, Belgien

Arbetsliv

Anställningar

Period	Anställning	Del av forskning i anställningen (%)	Arbetsgivare
april 2011 - Nuvarande	Professor, Tillsvidareanställning	75	Karlstads universitet, Sverige, Institutionen för ingenjörsvetenskap och fysik
juli 2004 - april 2011	Lektor, Tillsvidareanställning	50	Karlstads universitet, Sverige, Institutionen för ingenjörsvetenskap och fysik
oktober 2000 - juni 2004	Forskarassistent, Tidsbegränsad anställning	90	Karlstads universitet, Sverige, Institutionen för ingenjörsvetenskap och fysik
november 1998 - september 2000	Research Scientist, Tillsvidareanställning	100	Cambridge Display Technology
april 1998 - oktober 1998	Forskare, Tidsbegränsad anställning	100	University of Cambridge, Storbritannien och Nordirland, Cavendish Lab

Postdoktorvistelser		
Period	Organisation	Ämne
april 1998 - oktober 1998	University of Cambridge, Storbritannien och Nordirland, Cavendish Laboratory	10304. Den kondenserade materiens fysik
mars 1996 - mars 1998	École Polytechnique Fédérale de Lausanne, Nederländerna, Institut de Photonique et Interfaces	10402. Fysikalisk kemi
maj 1995 - februari 1996	Technische Universiteit Delft, Nederländerna, Lab. of Applied Inorganic Chemistry	10404. Oorganisk kemi

Forskarutbyten			
Period	Typ	Organisation	Ämne
januari 2025 - februari 2025	Gästforskare	Université de Mons, UMONS, Belgien, Laboratoire de Physique des Nanomatériaux et Energie (LPNE)	10304. Den kondenserade materiens fysik

Uppehåll i forskningen	
Period	Beskrivning
2024-01-01 - 2024-12-31	15% leave from KaU for chair position Nobel committee.
2008-02-04 - 2008-11-23	parental leave (50% and less)
2007-10-15 - 2008-02-03	parental leave (100%)
2006-07-18 - 2006-11-05	leave (100%)

Meriter och utmärkelser

Docentur		
År	Ämne	Organisation

År	Ämne	Organisation
2006	10304. Den kondenserade materiens fysik	Karlstads universitet, Sverige, Institutionen för ingenjörsvetenskap och fysik

Handledda personer				
År	Handledda personer	Lärosäte (handledd person)	Roll	Antal
	Doktorand	Karlstads universitet, Sverige, Institutionen för ingenjörsvetenskap och fysik, 7600	Huvudhandledare	9
	Doktorand	Karlstads universitet, Sverige, Institutionen för ingenjörsvetenskap och fysik, 7600	Bihandledare	5
	Postdok	Karlstads universitet, Sverige, Institutionen för ingenjörsvetenskap och fysik, 7600	Huvudhandledare	10
	Gästpostdok	Karlstads universitet, Sverige, Institutionen för ingenjörsvetenskap och fysik, 7600	Huvudhandledare	5
2028	Doktorand, André Johansson	Karlstads universitet, Sverige	Huvudhandledare	
2028	Doktorand, Asirin PM	Karlstads universitet, Sverige	Huvudhandledare	
2028	Doktorand, Shahna Mysin K	Karlstads universitet, Sverige	Huvudhandledare	
2026	Doktorand, Leticia Patricio Christopholi	Karlstads universitet, Sverige, Institutionen för ingenjörsvetenskap och fysik, 7600	Huvudhandledare	
2026	Doktorand, Suraj Prasad	Karlstads universitet, Sverige, Institutionen för ingenjörsvetenskap och fysik, 7600	Huvudhandledare	
2027	Doktorand, Flavia Pazhayatti	Ben-Gurion University of the Negev, Israel	Bihandledare	
2027	Doktorand, Klara Kiselman	Uppsala universitet, Sverige, 125 Inst för teknikvetenskaper	Bihandledare	
2025	Postdok, Saurabh Pareek	Karlstads universitet, Sverige, Institutionen för ingenjörsvetenskap och fysik, 7600	Huvudhandledare	

Bidrag erhållna i konkurrens					
Period	Finansiär	Projektledare	Din roll	Delbelopp (kr)	Totalt belopp (kr)
2024 - 2025	Knut och Alice Wallenbergs Stiftelse, Sverige - Annan forskningsfinansiär	Ellen Moons	Projektledare	0	2 576 779
2023 - 2027	Europeiska Unionen (EU),	Gregor Trimmel	Medverkande	3 054 580	28 086 438
2022 - 2027	Europeiska Unionen (EU),	Marjolein Thunissen	Medverkande	4 606 653	163 432 451

Period	Finansiär	Projektledare	Din roll	Delbelopp (kr)	Totalt belopp (kr)
2022 - 2027	SSF - Stiftelsen för strategisk forskning, Sverige - Annan forskningsfinansiär	Ellen Moons	Projektledare	0	2 792 586
2022 - 2025	VR - Vetenskapsrådet, Sverige - Annan forskningsfinansiär	Ellen Moons	Projektledare	0	4 056 000
2020 - 2025	Energimyndigheten, Sverige - Annan forskningsfinansiär	Ellen Moons	Projektledare	0	4 988 408
2017 - 2022	Knut och Alice Wallenbergs Stiftelse, Sverige - Annan forskningsfinansiär	Ellen Moons	Projektledare	0	28 700 050
2016 - 2019	VR - Vetenskapsrådet, Sverige - Annan forskningsfinansiär	Ellen Moons	Projektledare	0	3 070 000
2014 - 2019	Energimyndigheten, Sverige - Annan forskningsfinansiär	Ellen Moons	Projektledare	0	4 535 000

Priser och utmärkelser				
År	Land	Namn på priset/utmärkelsen	Utfärdare	Beskrivning
2022	Sverige	Ledamot i Nobelkommittén för fysik	Kungliga Vetenskapsakademien	
2017	Sverige	Ledamot i Kungliga Vetenskapsakademien, fysikklass	Kungliga Vetenskapsakademien	
2011	Sverige	Göran Gustafssonpris i fysik	Kungliga Vetenskapsakademien	

Andra meriter		
Period	Typ av merit	Beskrivning
2025 - 2027	Board member	Member of the Board of the Swedish Research Council.
2023 - 2026	Member of the Scientific Advisory Committee	Member of the Scientific Advisory Committee of MAXIV, Lund, Sweden.
2023 - 2026	Member of the University Reference Group	Member of the University Reference Group (URG) of the Wallenberg Initiative Materials Science for Sustainability (WISE).
2022 - 2026	Member of the Program Steering Group	Member of the Program Steering Group of the Solleforskningscentrum Sverige (SOLVE).
2025 - 2025	conference organiser	Chair of the organising committee of the Quantsol conference, Austria 23-29 March 2025.
2022 - 2025	Scientific leadership	Scientific leader and coordinator of Materials Research Group at Karlstad University.
2005 - 2025	PhD committee member	Member of the Examination board for over 30 PhD defences in physics, engineering physics, materials science, chemistry, and chemical engineering at Swedish universities.

Period	Typ av merit	Beskrivning
2022 - 2025	editorial work	Member of the Editorial Advisory Boards of RSC journals Journal of Materials Chemistry C and Materials Advances.
2016 - 2025	Editorial work	Occasional reviewer for Advanced Materials, Advanced Functional Materials, Advanced Energy Materials, Chemical Physics Letters, Environmental and Energy Science, Nature Communications and RSC journals.
2015 - 2024	Faculty Board	Member of the Faculty Board of the Faculty for Health, Science and Technology at Karlstad University.
2024 - 2024	conference organiser	co-chair Application Targets for Next Generation Photovoltaics, MRS Spring meeting, Seattle, USA, 22-26 April 2024.
2021 - 2024	conference organiser	co-chair of the Organic, Hybrid, and Perovskite Photovoltaics XXII, XXIII, XXIV and XXV (OP213) conferences at SPIE Organics + Photonics, San Diego, USA.
2020 - 2023	Board member	Board member of Myfab, the Swedish national research infrastructure for clean rooms and nanotechnology.
2023 - 2023	conference organiser	co-organiser of Nobelsymposium, Uppsala, 3-5 May 2023
2017 - 2022	Scientific Leadership	Scientific coordinator of the K.A. Wallenberg project SOLA, "Mastering Morphology of Solution-borne Electronics", with four partner universities: Karlstad University, Chalmers University of Technology, Linköping University and Lund University.
2014 - 2018	Management Committee Member	Management Committee Member Sweden, COST Action MP1307
2015 - 2015	Chair of the Scientific Council	Chair of the Scientific Council for Natural and Engineering Sciences, Swedish Research Council/Vetenskapsrådet, Sweden.
2013 - 2015	Vice-Chair of the Scientific Council	Vice-Chair of the Scientific Council for Natural and Engineering Sciences, Swedish Research Council/Vetenskapsrådet, Sweden.
2010 - 2015	Board Member	Board Member of the Swedish Physical Society.
2010 - 2012	Member of the Scientific Council	Member of the Scientific Council for Natural and Engineering Sciences, Swedish Research Council/Vetenskapsrådet, Sweden.

CV - Christian Müller

Medverkande forskare: Christian Müller
Födelsedatum: 19800709
Kön: Man
Land: Sverige

Dr-examen: 2008-11-10
Akademisk titel: Professor
Arbetsgivare: Chalmers tekniska högskola

Utbildning

Forskarutbildning		
Examen	Organisation	Namn på handledare
Doktorsexamen, 20403. Polymerteknologi, 2008-11-10	Eidgenössische Technische Hochschule Zürich, Schweiz	Paul Smith

Utbildning på grund- och avancerad nivå	
År	Examen
2004	10402. Fysikalisk kemi, Masterexamen, University of Cambridge, Storbritannien och Nordirland

Arbetsliv

Anställningar			
Period	Anställning	Del av forskning i anställningen (%)	Arbetsgivare
oktober 2017 - Nuvarande	Professor, Tillsvdareanställning	80	Chalmers tekniska högskola, Sverige, 2160 - Tillämpad kemi
juli 2015 - september 2017	Associate Professor, Tillsvdareanställning	85	Chalmers tekniska högskola, Sverige, 2160 - Tillämpad kemi
mars 2012 - juni 2015	Forskarassistent, Tidsbegränsad anställning	95	Chalmers tekniska högskola, Sverige, 2160 - Tillämpad kemi

Postdoktorvistelser		
Period	Organisation	Ämne
januari 2011 - februari 2012	Institut de Ciència de Materials de Barcelona (ICMAB-CSIC), Spanien	10403. Materialkemi
oktober 2008 - december 2010	Linköpings universitet, Sverige	10403. Materialkemi
april 2008 - september 2008	Eidgenössische Technische Hochschule Zürich, Schweiz	20403. Polymerteknologi

Meriter och utmärkelser

Docentur		
År	Ämne	Organisation
2014	10403. Materialkemi	Chalmers tekniska högskola, Sverige, 2160 - Tillämpad kemi

Handledda personer			
Handledda personer	Lärosäte (handledd person)	Roll	Antal
Doktorand	Chalmers tekniska högskola, Sverige, Tillämpad kemi	Huvudhandledare	24
Postdok	Chalmers tekniska högskola, Sverige, Tillämpad kemi	Huvudhandledare	19

Bidrag erhållna i konkurrens					
Period	Finansiär	Projektledare	Din roll	Delbelopp (kr)	Totalt belopp (kr)
2025 - 2029	Knut och Alice Wallenbergs Stiftelse, Sverige - Annan forskningsfinansiär	Christian Müller	Projektledare	0	15 000 000
2023 - 2026	VR - Vetenskapsrådet, Sverige - Annan forskningsfinansiär	Christian Müller	Projektledare	0	3 800 000
2022 - 2027	Europeiska Unionen (EU),	Christian Müller	Projektledare	0	20 000 000
2021 - 2026	Knut och Alice Wallenbergs Stiftelse, Sverige - Annan forskningsfinansiär	Christian Müller	Projektledare	0	8 750 000

Period	Finansiär	Projektledare	Din roll	Delbelopp (kr)	Totalt belopp (kr)
2021 - 2025	Europeiska Unionen (EU),	Martijn Kemerink	Medverkande	5 600 000	40 000 000
2019 - 2022	VR - Vetenskapsrådet, Sverige - Annan forskningsfinansiär	Christian Müller	Projektledare	0	3 800 000
2018 - 2022	VR - Vetenskapsrådet, Sverige - Annan forskningsfinansiär	Martijn Kemerink	Medverkande	0	3 000 000
2017 - 2022	Knut och Alice Wallenbergs Stiftelse, Sverige - Annan forskningsfinansiär	Ellen Moons	Medverkande	3 000 000	26 000 000
2017 - 2022	SSF - Stiftelsen för strategisk forskning, Sverige - Annan forskningsfinansiär	Christian Müller	Projektledare	0	12 000 000
2015 - 2020	Europeiska Unionen (EU),	Christian Müller	Projektledare	0	14 000 000

Priser och utmärkelser				
År	Land	Namn på priset/utmärkelsen	Utfärdare	Beskrivning
2024	Sverige	Norblad-Ekstrand Medal		
2024	Sverige	Fellow, Royal Swedish Academy of Engineering Sciences (IVA)		
2023	Kina	Qian Baojun Young Scholar Fiber Award		
2009	Schweiz	ETH Medal	Eidgenössische Technische Hochschule (ETH) Zürich	highest honour for outstanding doctoral thesis

Andra meriter		
Period	Typ av merit	Beskrivning
2005 - 2025	bibliometric summary	bibliometric summary (source: Google Scholar): h-index 67; citations >13000; including: 179 peer-reviewed publications; 11 review articles; 3 book chapters.
2014 - 2025	Invited presentations at conferences	46 invited presentations at international conferences, including 9 invited presentations at Spring and Fall MRS (USA), live streamed evening lecture at the ERC 10th anniversary celebration in Brussels (Belgium), two invited lectures at 2018 Gordon Conference on Electronic Processes in Organic Materials (Italy) and 2022 Gordon Conference on Hybrid Electronic and Photonic Materials and Phenomena (Spain)
2012 - 2025	reviewing activities	examiner/opponent of 22 PhD theses in the UK, Sweden, Denmark, Italy, France, Belgium, Germany, Australia + committee member of 17 grading committees in Sweden; evaluator for funding bodies in the EU, US, UK, Belgium, Austria, Norway, Poland, France, Spain, Israel, Canada; evaluator for faculty positions in Sweden, Denmark, US and China; reviewer for e.g. Nature Mater., Sci. Adv., Nature Commun., Adv. Mater., Adv. Funct. Mater., Adv. Energy Mater., ACS Nano, Energy Environ. Sci., Chem. Mater., JACS, Macromolecules
2014 - 2025	organisation of scientific meetings	co-organisier of 3 symposia at Fall MRS (Boston, US); 3 symposia at Spring EMRS (Lille & Strasbourg, France); 51st and 59th Nordic Polymer Days (Göteborg, Sweden); Organic Electronics Winter School (Göteborg, Sweden)

Period	Typ av merit	Beskrivning
2002 - 2025	institutional responsibilities	head of division, Applied Chemistry, Dept. of Chemistry and Chemical Engineering, Chalmers (2021+); advisory board member, Journal of Materials Chemistry C (2020+); steering group member, Wallenberg Wood Science Center (2019+); coordinator of the Chalmers excellence profile Materials for Energy Applications (2013-2017); vice-president then president of the student union (JCR) of Churchill College, Cambridge (2002-2004)
2012 - 2025	continuing education	SSF leadership programme for Future Research Leaders (2017--2021); Wallenberg Academy Fellow mentorship programme (2015 – 2026); Diploma of Higher Education (2012 – 2014); Chalmers leadership development training for Assistant Professors (2013 – 2014)
2012 - 2025	current teaching activities	examiner & main lecturer in Master course Polymer Technology; examiner & lecturer in Master course Polymer Chemistry & Physics; lecturer in bachelor course Colloids & Polymers

Immaterialrätt

Immaterialrätt					
Typ	Datum för beviljning	Status	ID	Licensierad till annan	Produkt klassificering
Patent	2018-10-03	Beviljad	EP 3,381,069	Ej Sverige - Statliga enheter	20. Kemikalier och kemiska produkter
Patent	2013-08-27	Beviljad	US 8,518,738	Ej Sverige - Företag	26. Datorer, elektronikvaror och optik
Patent		Beviljad	US 10,679,768	Ej Sverige - Företag	20. Kemikalier och kemiska produkter
Patent		Beviljad	EP 3,476,885	Ej Sverige - Företag	20. Kemikalier och kemiska produkter
Patent		Beviljad	US 10,941,276	Ej Sverige - Företag	20. Kemikalier och kemiska produkter
Patent		Beviljad	US 10,886,034	Ej Sverige - Företag	20. Kemikalier och kemiska produkter
Patent		Beviljad	US 10,679,769	Ej Sverige - Företag	20. Kemikalier och kemiska produkter

CV - Charlotte Platzer Björkman

Medverkande forskare: Charlotte Platzer Björkman
Födelsedatum: 19760410
Kön: Kvinna
Land: Sverige

Dr-examen: 2006-03-31
Akademisk titel: Professor
Arbetsgivare: Uppsala universitet

Utbildning

Forskarutbildning		
Examen	Organisation	Namn på handledare
Doktorsexamen, 20299. Annan elektroteknik och elektronik, 2006-03-31	Uppsala universitet, Sverige, Inst för teknikvetenskaper	Lars Stolt

Arbetsliv

Anställningar			
Period	Anställning	Del av forskning i anställningen (%)	Arbetsgivare
mars 2016 - Nuvarande	Professor, Tillsvdareanställning	85	Uppsala universitet, Sverige, 120 Inst för materialvetenskap
april 2015 - mars 2016	Lektor, Tillsvdareanställning	80	Uppsala universitet, Sverige, Inst för teknikvetenskaper
december 2010 - mars 2015	Biträdande lektor, Projektanställning	80	Uppsala universitet, Sverige, Inst för teknikvetenskaper
april 2006 - december 2008	Forskare, Projektanställning	90	Uppsala universitet, Sverige, Inst för teknikvetenskaper

Postdoktorvistelser		
Period	Organisation	Ämne
januari 2009 - december 2009	Institute for Energy Technology, Norge, SOL	20599. Annan materialteknik

Uppehåll i forskningen	
Period	Beskrivning
2012-09-01 - 2013-03-01	Parental leave
2006-05-24 - 2006-12-31	Parental leave
2003-12-05 - 2004-10-01	Parental elave

Meriter och utmärkelser

Docentur		
År	Ämne	Organisation
2010	20299. Annan elektroteknik och elektronik	Uppsala universitet, Sverige, Inst för teknikvetenskaper

Handledda personer				
År	Handledda personer	Lärosäte (handledd person)	Roll	Antal
	Doktorand	Uppsala universitet, Sverige, Inst för teknikvetenskaper	Huvudhandledare	8
	Postdok	Uppsala universitet, Sverige, Inst för teknikvetenskaper	Huvudhandledare	7
2017	Doktorand, Patrice Bras	Midsummer AB/Uppsala Universitet, Sverige	Huvudhandledare	
2025	Doktorand, Hezekiah Sawa	University of Dar es salaam, Tanzania, Physics Department	Bihandledare	
2012	Doktorand, Trygve Mongstad	University of Oslo/Institute for Energy Technology, Norge	Bihandledare	
2011	Doktorand, Per-Oskar Westin	Solibro Research AB, Sverige	Bihandledare	
2026	Postdok, AnnMaria James	Uppsala universitet, Sverige, 120 Inst för materialvetenskap	Huvudhandledare	

Bidrag erhållna i konkurrens

Period	Finansiär	Projektledare	Din roll	Delbelopp (kr)	Totalt belopp (kr)
2024 - 2026	WISE - Wallenberg Initiative Materials Science for Sustainability, Sverige - Övriga privata utförare	Charlotte Platzer Björkman	Projektledare	0	3 000 025
2020 - 2023	VR - Vetenskapsrådet, Sverige - Annan forskningsfinansiär	Charlotte Platzer Björkman	Projektledare	0	3 900 000
2020 - 2025	Energimyndigheten, Sverige - Övriga statliga myndigheter	Charlotte Platzer Björkman	Projektledare	0	4 990 300
2020 - 2024	Europeiska Unionen (EU),	Alejandro Perez Rodrigues	Medverkande	4 000 000	70 000 000
2019 - 2022	VR - Vetenskapsrådet, Sverige - Annan forskningsfinansiär	Håkan Rensmo	Medverkande	0	8 500 000
2016 - 2019	VR - Vetenskapsrådet, Sverige - Annan forskningsfinansiär	Charlotte Platzer Björkman		0	3 280 000
2016 - 2021	SSF - Stiftelsen för strategisk forskning, Sverige - Annan forskningsfinansiär	Charlotte Platzer-Björkman	Projektledare	0	30 870 000
2013 - 2018	Knut och Alice Wallenbergs Stiftelse, Sverige - Annan forskningsfinansiär	Charlotte Platzer-Björkman	Projektledare	0	7 500 000
2013 - 2017	SSF - Stiftelsen för strategisk forskning, Sverige - Annan forskningsfinansiär	Charlotte Platzer-Björkman	Projektledare	0	10 000 000
2008 - 2011	VINNOVA - Verket för innovationssystem, Sverige - Annan forskningsfinansiär	Charlotte Platzer-Björkman	Projektledare	0	2 343 000

Priser och utmärkelser				
År	Land	Namn på priset/utmärkelsen	Utfärdare	Beskrivning
2016	Sverige	Thuréus prize	Royal Academy of Sciences at Uppsala	
2011	Sverige	Large prize for young researchers	Göran Gustafsson Foundation	
2008	Sverige	Small prize for young researchers	Göran Gustafsson Foundation	
2003	Japan	Young Researcher Award	World Conference on Photovoltaic Energy Conversion, Osaka	

Andra meriter		
Period	Typ av merit	Beskrivning
2023 - 2025	Vice rector and Dean	Dean, Faculty of Science and Technology Vice rector, Disciplinary Domain of Science and Technology

Period	Typ av merit	Beskrivning
2023 - 2025	Board member WISE	WISE - Wallenberg Initiative Materials Science for Sustainability, KAW foundation Also university representative 2022-2023
2020 - 2023	Board member Mid Sweden University	Board member appointed by the government, Mittuniversitetet
2020 - 2023	Deputy vice rector	Deputy vice rector, faculty of Science and Technology, Uppsala University
2019 - 2020	Director of CEMUS	CEMUS - Centre for Environment and development studies, SLU and UU
2017 - 2019	Chairman grant panel	Chairman of evaluation panel for international post doc grants, Swedish Research Council

Immaterialrätt

Immaterialrätt					
Typ	Datum för beviljning	Status	ID	Licensierad till annan	Produkt klassificering
Patent	2006-02-01	Beviljad	PCT/SE2004/000689	Sverige - Övriga privata utförare	26. Datorer, elektronikvaror och optik

CV - Harald Rohrer

Medverkande forskare: Harald Rohrer
Födelsedatum: 19650224
Kön: Man
Land: Sverige

Dr-examen: 2002-12-03
Akademisk titel: Professor
Arbetsgivare: Linköpings universitet

Utbildning

Forskarutbildning			
Examen	Organisation	Avhandlingens titel	Namn på handledare
Doktorsexamen, 50401. Sociologi (Exklusive socialt arbete, socialantropologi, demografi och kriminologi), 2002-12-03	Karl-Franzens-Universität Graz, Österrike	Ecological Building Innovations as a Process of Social Learning: The Role of Users from the Perspective of Social Studies of Technology	Christian Fleck

Utbildning på grund- och avancerad nivå	
År	Examen
1999	50912. Teknik och samhälle, Masterexamen, University of Sussex, Storbritannien och Nordirland
1997	50401. Sociologi (Exklusive socialt arbete, socialantropologi, demografi och kriminologi), Magisterexamen, Karl-Franzens-Universität Graz, Österrike
1993	10399. Annan fysik, Civilingenjörsexamen/motsv, Technische Universität Graz, Österrike

Arbetsliv

Anställningar

Period	Anställning	Del av forskning i anställningen (%)	Arbetsgivare	Övrig information
november 2012 - Nuvarande	Professor, Tillsvidareanställning	100	Linköpings universitet, Sverige, Institutionen för tema (TEMA)	
oktober 1999 - oktober 2012	Lektor, Tillsvidareanställning	80	Alpen-Adria Universitt Klagenfurt, sterrike, Teknik- und Wissenschaftsforschung	1999-2002 Researcher; 2002-2010 Assistant Professor; 2010-2012 Associate Professor
september 1993 - oktober 1999	Researcher; not formally employed at University, Tillsvidareanställning	100	Interuniversitres Forschungszentrum fr Technik, Arbeit und Kultur	

Postdoktorvistelser		
Period	Organisation	mne
februari 2013 - mars 2013	The University of Manchester, Storbritannien och Nordirland, Manchester Architectural Research Centre	50701. Kulturgeografi
februari 2012 - mars 2012	Universitetet i Oslo, Norge, Institutt for sosiologi og samfunnsgeografi	50701. Kulturgeografi
september 2009 - juli 2010	Harvard University, USA, Weatherhead Center for International Affairs	50401. Sociologi (Exklusive socialt arbete, socialantropologi, demografi och kriminologi)
februari 2007 - februari 2007	EAWAG, Schweiz, Centre for Innovation Research in the Utility Sector	50912. Teknik och samhlle
februari 2005 - maj 2005	Budapesti Muszaki Es Gazdasagtudomanyi Egyetem, Ungern, Department of Innovation Research	50912. Teknik och samhlle

Meriter och utmrkelser

Handledda personer			
r	Handledda personer	Lroste (handledd person)	Roll
2029	Doktorand, Claudia Strambo	Linkpings universitet, Sverige, Institutionen fr tema (TEMA)	Huvudhandledare
2027	Doktorand, Stella Huang	Linkpings universitet, Sverige, Institutionen fr tema (TEMA)	Huvudhandledare
2026	Doktorand, Adam Svensson	Linkpings universitet, Sverige, Institutionen fr tema (TEMA)	Huvudhandledare
2024	Doktorand, Linus Ekman Burgman	Linkpings universitet, Sverige, Institutionen fr tema (TEMA)	Huvudhandledare
2024	Doktorand, Nancy Brett	Linkpings universitet, Sverige, Institutionen fr tema (TEMA)	Huvudhandledare

År	Handledda personer	Lärosäte (handledd person)	Roll
2023	Doktorand, Ravi Jayaweera	Universit�t Hamburg, Tyskland	Huvudhandledare
2020	Doktorand, Fredrik Envall	Link�pings universitet, Sverige, Institutionen f�r tema (TEMA)	Huvudhandledare
2019	Doktorand, Amelia Mutter	Link�pings universitet, Sverige, Institutionen f�r tema (TEMA)	Huvudhandledare
2018	Doktorand, Darcy Parks	Link�pings universitet, Sverige, Institutionen f�r tema (TEMA)	Huvudhandledare
2018	Doktorand, Johan Niskanen	Link�pings universitet, Sverige, Institutionen f�r tema (TEMA)	Huvudhandledare
2017	Doktorand, Anna Wallsten	Link�pings universitet, Sverige, Institutionen f�r tema (TEMA)	Huvudhandledare
2016	Doktorand, Thomas Berger	Alpen-Adria Universit�t Klagenfurt, �sterrike	Huvudhandledare
2015	Doktorand, Kirsten Ulsrud	Universitetet i Oslo, Norge, Institutt for sosiologi og samfunnsgeografi	Huvudhandledare
2014	Doktorand, Steffen Wirth	Alpen-Adria Universit�t Klagenfurt, �sterrike	Huvudhandledare
2027	Doktorand, Gavin Nilsson Lewis	Link�pings universitet, Sverige, Institutionen f�r tema (TEMA)	Bihandledare
2027	Doktorand, Giorgi Kankia	Link�pings universitet, Sverige, Institutionen f�r tema (TEMA)	Bihandledare
2026	Postdok, Amanda Winter	Link�pings universitet, Sverige, Institutionen f�r tema (TEMA)	Huvudhandledare
2023	Postdok, Mohsen Farhangi	Link�pings universitet, Sverige, Institutionen f�r tema (TEMA)	Huvudhandledare
2022	Postdok, Franceso Colona	Link�pings universitet, Sverige, Institutionen f�r tema (TEMA)	Huvudhandledare
2021	Postdok, Ekaterina Tarasova	Link�pings universitet, Sverige, Institutionen f�r tema (TEMA)	Huvudhandledare

Bidrag erh�llna i konkurrens					
Period	Finansi�r	Projektledare	Din roll	Delbelopp (kr)	Totalt belopp (kr)
2025 - 2027	Europeiska Unionen (EU),	Przemys�law Pluci�ski, UNIWERSYTET IM. ADAMA MICKIEWICZA W POZNANIU	Medverkande	3 350 000	33 515 700
2024 - 2029	Energimyndigheten, Sverige - Annan forskningsfinansi�r	Lena Neij	Medverkande	5 406 162	15 778 413
2024 - 2025	VINNOVA - Verket f�r innovationssystem, Sverige - Annan forskningsfinansi�r	Harald Rohrer	Projektledare	0	1 950 886
2024 - 2028	Formas, Sverige - Annan forskningsfinansi�r	Harald Rohrer	Projektledare	0	3 379 204
2024 - 2026	Formas, Sverige - Annan forskningsfinansi�r	Harald Rohrer	Projektledare	0	2 899 813

Period	Finansiär	Projektledare	Din roll	Delbelopp (kr)	Totalt belopp (kr)
2023 - 2023	Europeiska Unionen (EU),	EREVNITIKO PANEPISTIMIAKO INSTITOUTO SYSTIMATON EPIKOINONION KAI YPOLGISTON-EMP (ICCS)	Medverkande	1 000 000	0
2022 - 2027	Energimyndigheten, Sverige - Annan forskningsfinansiär	Harald Rohrer	Projektledare	0	9 669 777
2019 - 2024	Familjen Kamprads stiftelse, Sverige - Annan forskningsfinansiär	Ulf Melin	Medverkande	5 000 000	25 000 000
2019 - 2022	VR - Vetenskapsrådet, Sverige - Annan forskningsfinansiär	Harald Rohrer	Projektledare	0	3 931 196
2014 - 2018	Formas, Sverige - Annan forskningsfinansiär	Harald Rohrer	Projektledare	0	2 909 000

Priser och utmärkelser				
År	Land	Namn på priset/utmärkelsen	Utfärdare	Beskrivning
2002	Österrike	Best dissertation award	Faculty of Social Sciences, University of Graz	

Andra meriter		
Period	Typ av merit	Beskrivning
2020 - 2025	Summary of publications (past 5 years)	Total number of publications (exceeding 5 years): 196 (h-index Google Scholar: 32; 10242 citations) ----- Number of publications of various types (within the past 5 years) Articles in peer-reviewed journals: 28; Book chapters: 10
1997 - 2023	Member of scientific boards	- Expert group, European Commission, Systems approaches to evaluation of transformative innovation policies (since 2025) - Board of the Swedish platform for System Innovation Research in Interaction (SIRI) (since 2023) - Energiutvecklingsnämnd, Energimyndigheten (since 2020) - Chair of the board of the Centre for Man, Technology and Society, Linköping University (2018-2022) - Board member of the Centre for Municipality Studies (CKS), Linköping (2015-2022) - Advisory Committee of the Stuttgart Research Center for Interdisciplinary Risk and Innovation Studies, Stuttgart (ZIRIUS, since 2012) - International Advisory Board of the Norwegian Research Centre on Zero Emission Buildings, Trondheim (2011-2017) - Scientific board member of the Institute for Advanced Studies on Science, Technology and Society (since 1999) - Board of Joanneum Research Austria (1999-2002) - Scientific advisory board of the German programme "Transformation and Innovation in Power Systems" (2002-2007)
2005 - 2023	Editor and editorial boards of academic journals	Associate Editor of 'Environmental Innovation and Societal Transitions' (since 2014). Editorial Board (Section Sustainable Urban and Rural Development) of the journal 'Sustainability' (since 2016); editorial board of Društvena istraživanja: journal for general social issues, Croatia (2017-2019). Co-Editor of 'Science, Technology and Innovation Studies (STI-Studies)' (2010-2015). Contributing Editor of the EASST Review, European Association for Social Studies of Science and Technology (2005-2011).

Period	Typ av merit	Beskrivning
2003 - 2023	Functions in professional associations	Chair of the board of the Sociology of Science and Technology NETWORK (SST-NET) of the European Sociological Association (2007-2019). 'Speaker' of the Sociology of Science and Technology section of the Austrian Sociological Association (2007-2012). Vice-President of the Austrian Sociological Association (2003-2007).
2000 - 2023	Project evaluator and member of review committees	- 7th Research Framework Programme of the European Union - ERA-net, different calls - National Science Foundation, USA - Swiss National Science Foundation - Norwegian Research Council - Nordic Energy Research - norden - Sustainable Energy Systems 2050 (Nordic Energy) - UK Government Office for Science - Engineering and Physical Sciences Research Council (EPSRC), UK - Economic and Social Research Council (ESRC), UK - Netherlands Organisation for Scientific Research (NWO) - Dutch Technology Foundation (STW) - German Ministry of Research (BMBF) - Helmholtz Association of German Research Centres (chair of the international review committee for the research field 'Technology, Innovation and Society' 2014-15; chair of the review committee for a new Institute for Networked Energy Systems, 2017) - Research Programmes of the Austrian Ministry of Science and Research - Austrian Academy of Science - Vienna Science and Technology Fund (WWTF) - Austrian Climate Research Programme
2003 - 2023	PhD examiner and opponent	34 times member of PhD examination committees; 12 times faculty opponent in PhD defenses

Registrera

Villkor

Ansökan ska förutom av den sökande även signeras av behörig företrädare för medelsförvaltaren. Företrädaren är vanligtvis prefekten vid den institution där forskningen ska bedrivas men beror på medelsförvaltares organisationsstruktur.

Signering av den *sökande* innebär en bekräftelse av att

- uppgifterna i ansökan är korrekta och följer Vetenskapsrådets instruktioner
- eventuella bisysslor och kommersiella bindningar har redovisats för medelsförvaltaren och att det där inte framkommit något som strider mot god forskningssed
- de tillstånd och godkännanden som krävs finns innan forskningen påbörjas, exempelvis tillstånd från Läke-medelsverket eller godkännande från Etikprövningsmyndigheten respektive djurförsöksetisk nämnd
- sökande kommer att följa samtliga övriga villkor som gäller för bidraget.

Signering av *medelsförvaltaren* innebär en bekräftelse av att

- den beskrivna forskningen eller forskningsstödande verksamheten kan beredas plats vid medelsförvaltaren under den tid och i den omfattning som anges i ansökan
- den sökande kommer vara anställd vid medelsförvaltaren under den tid som ansökan avser
- medelsförvaltaren godkänner kostnadsberäkningen i ansökan
- medelsförvaltaren kommer att följa samtliga övriga villkor som gäller för bidraget.

Ovanstående punkter ska ha diskuterats mellan parterna innan företrädaren för medelsförvaltaren godkänner och signerar ansökan.