

NEWS INTERNATIONAL


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Fraunhofer Center for International Management and
Knowledge Economy IMW

EDITORIAL

Remeasuring Socio-economic Research at Fraunhofer



Professor Dr. Thorsten Posselt 
Institute Director of the Fraunhofer Center for International
Management and Knowledge Economy IMW

Dear reader,

The end of 2016 is fast approaching, allowing us a brief glance back at the year that has passed. Globally, this year has brought the Paris climate conference, the crises of war in the world, the challenges of coping with refugee movements in Europe - from housing to integration - and presidential elections that have instigated massive change in the US. The implications of these events must also be considered in relation to socioeconomic research. How megatrends affect society, industry, the economy and sciences is one of the central research questions that we have to incorporate into our scientific work.

For ten years, the Leipzig Fraunhofer Center has dedicated itself to socioeconomic measurement of the knowledge economy through applied research. What began as the Fraunhofer Center for Central and Eastern Europe, has since 2015, morphed into the Fraunhofer Center for International Management and Knowledge Economy IMW, or in short: Fraunhofer IMW. The internationally facing institute works with companies, institutions and governments at federal and state level as well as the European Union. We'll continue to do this on an ever greater scale, finding ongoing success with a growing number of partners, project owners and clients in the public realm and in industry. We take a look back at our anniversary year and our international research projects in our 2015/2016 annual report, which has arrived from the printers and is also digitally available on our website. In addition to the annual report, this newsletter will provide you with an informative impression of selected focal points of the institute during the current year. Browse through the report, whether digitally or manually, and feel free – in fact, we encourage you – to make contact with our scientists.

The global agenda is also a determining factor in our work. It is not without reason that I adopted a theme for a congress addressing

EDITORIAL

start-ups that highlighted the message to not leave internationalization to chance. In this newsletter, we report on the visit of a Swedish delegation comprising local and regional politicians, whom we informed about Fraunhofer's refugee projects and contributions towards refugee integration. We also look to this year's Day of German Unity on October 3rd – in which, as part of the scientific mile of the citizens' festival in the state capital Dresden, the Saxon Fraunhofer institutes participated. In addition, we can happily announce the nomination of the C³ project on the opportunities and possibilities presented by the material Carbon Composite material, for the German Sustainability Award 2016.

Read more about the institute's joining of the initiative Morgenstadt - City Insights, which is anchored in our Fraunhofer Innovation Network, in order to incorporate our economic perspective. In a practical example, the work of applied research can be seen in Fraunhofer IMW's contribution to a project in which street lights will double as charging stations for electric cars in Leipzig, which was featured in the federal government's „Electromobility Showcase“. During a visit to the TU Dresden, Federal Research Minister Johanna Wanka informed herself on Fraunhofer's collaborative project „ATMoSPHÄRE“, a digital platform for the elderly with multiple diseases – about which you can read more in this newsletter. Finally, this newsletter informs you of new publications by the institute's scientific staff and about changes in personnel, especially about our new employees and their research areas, which will further strengthen Fraunhofer IMW's service offerings to our customers and partners.



Professor Dr. Thorsten Posselt
Institute Director of the Fraunhofer Center for
International Management and Knowledge Economy IMW



INSTITUTE NEWS

Don't Leave Internationalization to Chance

Institute Director Prof. Posselt presents at the „Company: Grow“ Congress

Prof. Dr. Thorsten Posselt, Institute Director and head of the Corporate Development in International Competition Division, represented Fraunhofer IMW on November 9th, 2016 at the „Company: Grow“ Congress which featured workshops within the theme „ Don't Leave Internationalization to Chance“.

The event, organized by the Federal Ministry for Economic Affairs and Energy (BMWi), brought together entrepreneurs, scientists, networkers and union representatives to discuss technological change, international competition and the lack of capital-intensive companies in eastern Germany. In particular, small and medium-sized enterprises can lack the necessary resources and strategic competencies to lay groundwork for holistic and often highly complex internationalization strategies. The goal of the congress and the accompanying before-hand online dialogue was to inform these companies on the opportunities and challenges presented by internationalization, thus allowing them to plan and react accordingly.

[Link: More information about the congress](#)



INSTITUTE NEWS

10 YEARS

Leipzig Fraunhofer Center

In 2016, Fraunhofer IMW looks back on ten years of applied socio-technological and socio-economic research and experience at its Leipzig location.

For the long-term success of customers and partners from business, industry, research and society, the economists of Fraunhofer have developed scientifically grounded solutions for the challenges of globalization. Man, his environment and life are the focus of the institute's international projects, networking activities, innovation undertakings and analyses.

Initially founded as the Fraunhofer Center for Central and Eastern Europe MOEZ in 2006, on July 18th, 2016, the institute relaunched under the new name the Fraunhofer Center for International Management and Knowledge Economy IMW and expanded its economic, social, political and cultural sciences expertise offerings through an updated range of services. The international and interdisciplinary team of experts answers questions about knowledge and technology transfer, corporate development in international competition, sustainability management and infrastructure economics.

[More information on Fraunhofer IMW's anniversary](#)



Annual Report 2015/2016

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The 2015/2016 annual report offers a review of the last ten years at the Leipzig Fraunhofer Center and provides background on selected current projects and research activities.

The employees have further developed the institute's business areas and core competencies as well as expanded the scope of the socio-economic research in terms of content and personnel.

The 2015/2016 annual report provides insights into the daily interdisciplinary work and international perspective of the institute's researchers.

Order your copy of the 2015/2016 annual report through Dirk Böttner-Langolf:
dirk.boettner-langolf@imw.fraunhofer.de
 or by phone at 0341-231039-250.

INSTITUTE NEWS

DIN and KIT Innovation Conference

Speech by Fraunhofer expert Dr. Nizar Abdelkafi on the practice of patenting and standardization in start-ups


Standardization and patenting can protect innovations and guarantee the marketability of a company.

At a joint conference of the German Institute for Standardization (DIN) and the Karlsruhe Institute of Technology (KIT) held on October 5th and 6th, 2016 in Karlsruhe, experts from business, politics and research discussed the advantages and disadvantages of standardization and patenting.

Dr. Nizar Abdelkafi, head of the Business Models: Engineering and Innovation unit at Fraunhofer IMW, reported on the START-MIT-NORM research project (see page 16). At the conference, he presented before and after best practice-examples of young companies, and discussed how standardization - alone or in combination with other options such as patenting - can be a key factor affecting innovative start-ups.

Three questions for Dr. Nizar Abdelkafi



 Dr. Nizar Abdelkafi
head of the Business Models: Engineering and Innovation unit at Fraunhofer IMW

Is it of particular importance for young companies to learn about standardization and patenting?

The decision to incorporate standardization, patenting or a combination of these instruments often falls by the wayside in young companies and start-ups, which means that important information and knowledge are missing. Therefore, within the scope of our project START-MIT-NORM, we incorporated ten best practice case studies, from which a tool for sound decision - making between the available options has been developed.

Which examples did you use to examine the advantages and disadvantages of standardization and patenting? What characterizes the companies presented?

The company AZUR, for example, has developed a material testing procedure that significantly reduces test duration and personnel expenses. Through patents, the company has secured IP protection. So far AZUR is the only company that, according to the new draft pre-standard of the German Institute for Standardization, can test DIN SPEC - a real competitive advantage thanks to standardization.

What are the impulses for your research project? What ideas and suggestions might you have for further work?

There is a great need for practical tools in the area of standardization. The awareness of companies - especially start-ups - regarding the advantages presented by these instruments can be further increased. That is why as part of the START-MIT-NORM project we have now developed, for example, a decision-making tool to address collective concerns that were spread among the companies.

INSTITUTE NEWS

The Contribution of Science Toward the Integration of Refugees

Delegation of Swedish politicians from local and regional levels receive a briefing on the applied socio-economic research of Fraunhofer IMW

Fraunhofer expert Professor Dr. Dauth made a presentation using the example of refugee integration and Fraunhofer IMW's accompanying scientific research.

On October 5th, 2016, a twenty-strong delegation of Swedish local and regional politicians from the Committee on Growth and Regional Development of the Swedish Association of Local Authorities and Regions (SKL) visited the Fraunhofer Center for International Management and Knowledge Economy IMW. The purpose of the trip was to learn about the German infrastructure and integration initiatives used to find answers for, and to cope with, the current movement of refugees. The Swedish Association for Local and Regional Policy and the Swedish Association of Local Authorities and Regions (SKL / SALAR), represent the professional as well as labor and political interests of the 290 cities and towns and 20 regions in Sweden. SKL thus counts as one of the largest workers' organizations in Sweden and offers services to, and represents the interests of, over one million municipal workers against the local and regional municipal authorities. The organization speaks on behalf of its members against the government, the Swedish Parliament (Riksdag), government agencies, the EU and other key organizations.

Professor Dr. Tobias Dauth, head of the Regional Positioning and Location Development unit, welcomed the Swedish delegation to Fraunhofer IMW and presented on the institute. He highlighted the prospects for fled people in Germany on the basis of the Fraunhofer Gesellschaft's interdepartmental Task Force for Integration, of which Dr. Dauth is a member. The Fraunhofer Gesellschaft hopes to collaborate with other

research associations to scientifically support refugees during the integration process. The experts from Fraunhofer IMW are coordinating the accompanying scientific research on the integration of refugees and also participating in the workplace focused „Integration of Refugees“ by the BA, the Federation of German Industries (BDI) and the the Federal Employment Agency (BA) by providing their expertise. The integration of refugees is driving society, industry and business as well as research organizations. The goal is to help the many people seeking protection in Germany by providing adequate integration services, and to answer the question of how those who have fled can be integrated into the labor market and society. In the accompanying research, alongside the instrumentality of language and specialist knowledge through online platforms, the management of economic-organizational integration and the allocation of microcredits to refugees occupy a central position.

The Swedish delegation was inspired by the lecture and the activities and measures offered by the non - university applied research, and learned how Germany has addressed the refugee movement and integration of people into society and the working world on different levels and through various approaches, programs and infrastructure.

The exchange is to be continued.

[More information on the Regional Positioning and Location Development unit](#)

INSTITUTE NEWS

Day of German Unity in Dresden

Saxony's Fraunhofer institutes provide information on research projects at the Scientific Mile



↑ Stanislaw Tillich, Minister President of the Free State of Saxony, during his visit to the Fraunhofer tent.

← The Leipzig-based institutes - Fraunhofer IMW and Fraunhofer IZI – provided information about socio - economic and cell therapeutic research.

Around 1,000 scientists from the Fraunhofer Gesellschaft are active in the Free State Saxony - the federal state constitutes a regional focus for the research organization.

At the Day of German Unity festivities, held from October 1st to 3rd, 2016 in Dresden, the Saxony institutes presented on selected research projects to interested visitors.

Fraunhofer IMW participated in the Fraunhofer Gesellschaft initiative by providing information on its e-health project ATMOSPHERE and on the study on the economic and social value of cultural heritage at a joint stand shared with its

Leipzig-based sister institute, the Fraunhofer Institute for Cell Immunology and Cell Therapy IZI.


The Saxon Minister of State for Science and Art, Dr. Eva-Maria Stange, offered thanks for the commitment and dedication of the Saxon research institutes:

„They have painted a picture and left an impression for visitors to take away, that depicts the Free State of Saxony as a modern, international and cosmopolitan place which produces unique nation – and - worldwide achievements in many areas of sciences and the arts.,,

INSTITUTE NEWS

Carbon Concrete Researchers Nominated for Germany Sustainability Award 2016



 C3 consortium strategy workshop at Fraunhofer IMW

Three Dresden-based professors, Manfred Curbach, Director of the Institute of Concrete Structures at the Dresden University of Technology, Chokri Cherif, Director of the Institute of Textile Machinery and High Performance Material Technology and Peter Offermann, Chairman of the Board at TUDALIT e.V. and an advisor to the German Concrete Textile Center, have been nominated for the German Carbon Concrete Researchers Nominated for Germany Sustainability Award 2016.

Through the nomination, the joint project „C³ - Carbon Concrete Composite“, with which researchers from the Leipzig Fraunhofer Center are involved, has received fresh recognition. The Fraunhofer team, under the leadership of Dr. Marija Radić and Dr. Nizar Abdelkafi, has carried out nationwide investigations on the capabilities of composite carbon concrete, a new material, since June 2014 together with more than 140 partners from science, business and other associations. They prepared a study which identifies the markets and market segments for carbon concrete composite.

The flexibility of carbon concrete composite makes it more resource-conserving than other building materials and opens up numerous possibilities for architectural design.

[Further information on the Business Models: Engineering and Innovation unit](#)

[Further information on the Price and Service Management unit](#)

WORKSHOP

System services of installations in distribution networks

The planned expansion of renewable energies must be achieved by 2020. However, the accompanying requisite network expansion is unable to keep in step.

In particular, distribution network operators and service providers for the supra-regional power supply face numerous challenges in order to be able to ensure supply security for the final consumer. These include the handling of generating plants which must be operated within a confined network area and the exchange of appropriate data between the actors.

Researchers from Fraunhofer IMW's Energy Management and Energy Economics unit were therefore invited on September 20th, 2016, alongside representatives from transmission system operators, municipalities and direct marketing, to Leipzig to discuss and develop possible joint action options for future cooperation on power supply and feed management. The event was moderated by Professor Thomas Bruckner, head of the Sustainability Management and Infrastructure Economics Division. The debate will be presented in a short study by the Leipzig Fraunhofer Center.

[Further information on the Energy Management and Energy Economics unit](#)

INSTITUTE NEWS

Alternative Financing Approaches

UNIDO invites Leipzig researchers to speak on alternative financing instruments

On the invitation of the United Nations Industrial Development Organization (UNIDO) - Industrial Resource Efficiency Division, Leipzig Fraunhofer researchers Dr. Robin Bürger and Jens Rockel presented at the UNIDO-hosted expert talks on the topic „Financing SMEs in developing countries: Credit Risk Management of banks and innovative financing mechanisms“, speaking about their experiences with, and scientific knowledge of, alternative financing instruments.

On September 22nd and 23rd, 2016, international experts discussed different financing methods for green innovation projects. During the event's first day, representatives from the Bundesbank and UNIDO delivered insights into classical financing instruments. On the second day, alternative financing approaches shifted into focus.

Fraunhofer IMW at the Ambassadors' Conference of the Foreign Office

The 15th Ambassador's Conference of the German Foreign Office, which took place from August 29th to September 1st, 2016, was attended by high-ranking representatives from politics, business and culture.

Dr. Steffen Preissler, Head of the Knowledge and Technology Transfer Division, took part in the event and the accompanying business day. „Many of the topics addressed are relevant to our research work in Leipzig,“ noted the political scientist and Fraunhofer researcher. In particular, the issue of digitalization was a major focus of the event. Since the opening of the institute's own Big Data center, the digitization of business processes has become an important research topic for the Fraunhofer Center in Leipzig.

Cities of Tomorrow

Fraunhofer IMW participates in the innovation network „Morgenstadt - City Insights“

On July 18th, 2016, Fraunhofer IMW joined the innovation network „Morgenstadt - City Insights“, which through co-operations between industry, research and local actors examines technologies and solutions for the sustainable city of tomorrow through pilot projects. In the coming two years, the Leipzig researchers will provide the innovation network with their socio-technological and socio-economic perspective on the market.

Professor Dr. Thorsten Posselt, Institute Director of the Fraunhofer IMW, emphasized: „Cities can inject themselves, like companies and research facilities do, with information and knowledge about different paths and their own knowledge and skills. One of these ways is through participation in innovation networks.,“



↑ Prof. Dr. Thorsten Posselt Prof. Dr. Thorsten Posselt speaks on the innovation network „Morgenstadt - City Insights“

INSTITUTE NEWS

How Illuminating!

Street lights double as charging stations for electric cars in Leipzig

Leipzig researchers are developing business models for increased electromobility.

With nearly 160 publicly available charging points located within its urban borders, the foundation for loading electric cars has been well laid in Leipzig. On August 12th, 2016, with the city's Lord Mayor in attendance, representatives from various scientific institutions and the Leipziger Group, in the presence of the Lord Mayor, unveiled four LED streetlights that will double as loading stations for electric cars. The lights were developed by scientists from the Leipzig University of Applied Sciences (HTWK) and the Leipziger Group.

The idea behind is relatively simple: While it is easy to charge your electric car when at home or in the countryside, the loading infrastructure in cities should also be increased - and this can be effectively accomplished by integrating it into the streetscape. The advantages of street light parking are obvious: Street lights are already present and are simple to retrofit. If the performance of the existing lighting network is sufficient, new power lines will not be needed. Plus, at these stations E-cars can be loaded over night. Fraunhofer IMW is providing a socio-economic perspective while carrying out the project in tandem with the University of Leipzig.

Dr. Nizar Abdelkafi, head of the Business Models: Engineering and Innovation unit, said at the opening: „The new charging stations establish a further basis for the acceptance of electromobility by current and future users. We are watching closely, to see which of the targeted business models will be implemented in the future.“ The project aim is to develop a market-ready product. In the future, the Leipzig street lights will be marketed worldwide. It is planned that Leipziger Leuchten, a medium-sized enterprise, will include the street light loading station in its offerings. Researchers from the Business Models: Engineering and Innovation unit have already developed a showcase electromobility program for the federal government's „Electromobility Connects“ project, demonstrating that lamps with loading units can provide a viable business model for public charging infrastructure.

[Further project information](#)



↑ Burkhard Jung, Lord Mayor of the City of Leipzig, opened the charging station.

On August 12th, a total of four LED streetlights were unveiled in the Leipzig Musikviertel. ↓




INSTITUTE NEWS

Federal Research Minister Wanka's Summer Travels

Stopover at the Dresden University of Technology to learn more about telemedicine project ATMoSPHARE



On August 2nd, 2016, Johanna Wanka, the Federal Minister for Research, visited the Faculty of Medicine at the Dresden University of Technology to learn about ATMoSPHÄRE, a joint project in which a telemedical platform for people with multiple chronic illnesses was developed and tested. The Price and Service Management unit at Fraunhofer IMW researched and advised ATMoSPHÄRE on the user and market orientation of the platform. Furthermore, with regard to the subject of multiple diseases, ATMoSPHÄRE will compile important economic impulses, initially for Saxony and Baden-Württemberg, to delineate a concept that will be transferable to other areas. An interview about ATMoSPHÄRE was featured in the Leipzig Fraunhofer Center's Newsletter 1/2016.

 Federal Minister for Research Johanna Wanka (3.f.r.) poses with projects partners from ATMoSPHÄRE. © Stephan Wiegand, MF TUD

[Further project information](#)

INSTITUTE NEWS

New Trustees at the Institute

Board of Trustees meets in Leipzig

On May 24th and 25th, 2016, the Leipzig Fraunhofer Center's Board of Trustees met for the fourth time in Leipzig. At the meeting, Uli W. Fricke, co-founder of Triangle Venture Capital Group and Managing Director of FunderNation GmbH, and Dr. Fritz Jaeckel, head of the Saxony State Chancellery and Minister of State for Federal and European Affairs, became members of the institute's Board of Trustees. The body discussed with management and division and unit heads ongoing strategic development pertaining to the institute's new focus on aspects of internationalization and the global knowledge economy following its reorientation in July 2015.

The Board of Trustees has advised the Leipzig Fraunhofer Center since 2013. Dr. Wilhelm Krull, Secretary General of the Volkswagen Foundation, is the Board's Chairman. The next meeting will occur in May 2017.

[More information on the Board of Trustees](#)

Visitors in Leipzig

Leipzig Fraunhofer Center presents its socioeconomic research work to visiting Ukrainian students

On June 7th, 2016, master's students from the Ukraine's Lviv Institute of Management learned about the Chair of Prof. Dr. Thorsten Posselt at the University of Leipzig during a visit to Germany. His scientific assistant, Manuel Molina Vogelsang, discussed innovation economics and the Leipzig Fraunhofer Center's socio-economic work with the students, who specialize in the subject of management. The Leipzig institute is closely interlinked with the Faculty of Economics and Management Science: In addition to Professor Posselt, Prof. Dr. Thomas Bruckner, head of Fraunhofer IMW's Sustainability Management and Infrastructure Economics Division, is Director of the Institute for Infrastructure and Resources Management.

[Further information on the Stakeholder Dialogue and Social Acceptance unit](#)

Through the Night

Long Night of Science in Leipzig



↑ Aleksandra Lewandowska (right), scientific assistant, introduces the technology project DISIRE, which optimizes processes, resources and energy consumption in the European manufacturing industry.

From the Botanical Garden to the Bio City and beyond – on June 24th, 2016, numerous organizations, including universities, colleges and non - university research institutions provided exciting insights into their work during the Long Night of Science.

The Leipzig Fraunhofer Center teamed with the Fraunhofer Institute for Cell Therapy and Immunology IZI to offer a varied program. In the „Expedition through the global world“, the team presented select international projects of the institute and offered country-typical culinary specialties as refreshment. At the Kicker Tournament and Tip Game, soccer enthusiasts were able to test their predictive skills.



↑ Mandy Bollinger (right), scientific assistant, discussing the DICAMP master's program, which the Leipzig institute has built with partners at three Tunisian universities.

INSTITUTE NEWS

Science Infrastructure Management Support

Training program for Polish research managers celebrates its anniversary

In mid-June, the „Science Infrastructure Management Support (SIMS) „ conference took place in Warsaw. The occasion also marked the 3-year anniversary of the project that shares the same name which was implemented by the Leipzig Fraunhofer Center, the National Center for Research and Development in Poland, the Dresden University of Technology and IBM. Within the scope of SIMS, the Leipzig Fraunhofer Center and its project partners oversaw training for Polish research managers in 2013 and 2014. Wojciech Roskiewicz, head of the Research and Business Accelerator unit at the Leipzig Fraunhofer Center, described for some 75 guests the future potential for further cooperation opportunities and the risks presented by the commercialization of research and development infrastructures.

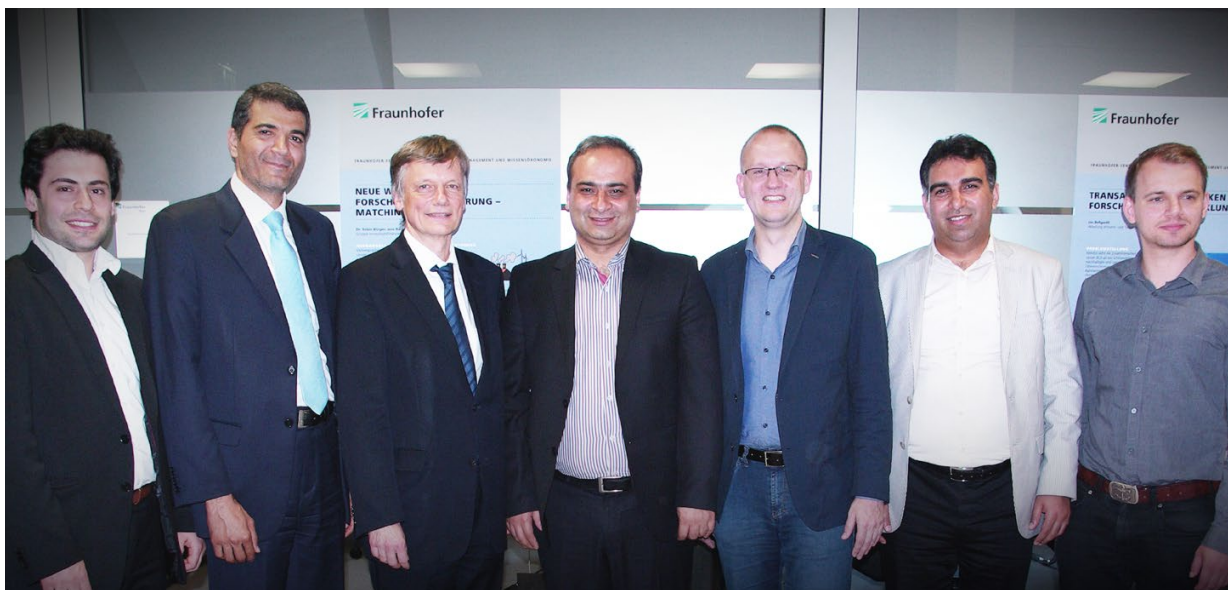
Cooperation with Iran

Experts from the Leipzig Fraunhofer Center discuss study and cooperation possibilities with Iranian delegation

Since the EU ended its imposed sanctions against Iran earlier this year, both sides have sought to form a stronger collaborative economic relationship. One researcher from the Leipzig Fraunhofer Center has conducted a study on Iran's research and innovation system and concluded that that despite the country's increasing knowledge of innovation, its innovation output and existing networks could be put to better use.

One of the central non-governmental organizations (NGOs) which sponsors knowledge and technology transfer in Iran is the Iranian Association for Management of Technology (IRAMOT). On June 2nd, 2016, Dr. Mahdi Elyasi, Chairman of the Board of IRAMOT, Institute Director Prof. Dr. Thorsten Posselt, Prof. Dr. Utz Dornberger, a unit head at Fraunhofer IMW, and participating researchers from the Entrepreneurship and Innovation for Development Cooperation unit discussed the results of the study in Leipzig along with possibilities for cooperation. Together they developed initial project ideas for improving the marketability of technological innovations from small and medium - sized enterprises in Iran.

Delegation of the Iranian Association for Management of Technology (IRAMOT), f.l.t.r.: Alireza Ansari (Fraunhofer IMW), Amir Afshar, Prof. Dr. Thorsten Posselt (Fraunhofer IMW), Dr. Mahdi Elyasi, Prof. Dr. Utz Dornberger (Fraunhofer IMW), Dr. Mehdi Mohammadi, Balthasar Klinkel (Fraunhofer IMW).



NEW PUBLICATIONS:

Study

Study Released on Academic Entrepreneurship and the Humanities and Social Sciences in Germany and Poland

Knowledge-based foundations and spin-offs contribute towards an economic and social dynamic from which education systems and labor markets can benefit.

However, an imbalance between different scientific disciplines regarding investigation and funding to promote start-ups can be observed. While the natural, engineering and economic sciences receive by far the most scientific and medial attention – and reap manifest benefits from funding programs, the funding and inhibitory issues facing entrepreneurial activities in the humanities and social sciences have been subject to less examination.

Presently, graduates from these disciplines are increasingly undertaking independent entrepreneurial activities. Thus with the growing importance of cultural and creative industries this plays an increasingly vital role.

Fraunhofer IMW and the University of Wrocław (UWr) have initiated a study on this topic. It will be based on a comparative examination of founder biographies from selected companies and an analysis of designated sponsorship infrastructures from the „Academic Entrepreneurship from the Humanities and Social Sciences in Germany and Poland“, with the aim of increasing understanding and visibility. Individual empirical surveys by selected founders, multipliers and sponsors will serve as a basis for the study.

The study will soon be available for download on our website at www.imw.fraunhofer.de/de/publikationen

Lecture and Specialist Article:

Lecture and article on the simulation of company decisions for start-ups at the EURAM

**What growth strategy should we pursue?
What growth can we achieve with this?
How risky is the chosen growth strategy?**

These are questions that are of existential importance for start-ups. Researchers from Fraunhofer IMW's Business Models: Engineering and Innovation unit investigated which growth strategies match best with particular business models. Dr. Nizar Abdelkafi and Karl Täuscher presented their findings in June at the European Academy of Management – EURAM conference in Paris. The Leipzig researchers set forth a simulation tool with which start-ups can simulate several growth strategies for different market scenarios. Analyses are based on the Lean-Start-up-Method. The experts published their findings in the article „Modeling the Lean Start-up: A Simulation Tool for Entrepreneurial Growth Decisions“ which was included in the conference proceedings. The EURAM counts as one of the most important European conferences in the management field and brings together several hundred management researchers each year. As part of a peer review process, the paper was selected to be presented to the international research community.



NEW PUBLICATIONS

Guide

New Edition of the Digitization Guide Released at Federal Government IT summit

In collaboration with HAGENagentur and IMK Consulting, a group of experts worked under the leadership of Dr Marija Radic and Dr JProf. Dr. Lutz Maicher on a second, extended edition of the guide „Future Prospects of Digitization“ for the Federal Ministry of Economic Affairs and Energy.

The new edition was released at the Federal Government's IT summit on November 16th, 2016. In the guide, small and medium-sized enterprises will find impulses and orientation tips for how to implement internal digital measures on a step by step basis.

[To the first edition of the digitization guide](#)



Study

Study Published on Big Data in the Health Insurance Market

That the use of Big Data technologies on the health insurance market promises many benefits is indisputable: data volumes can be more quickly and better processed, and valuable information is thus gained.

But what kind of understanding do legal bodies and private health insurers have of Big Data? Scientists from Fraunhofer IMW and the University of Leipzig examined the relevance of Big Data for the health insurance market with the Health Care Forum in Leipzig. The results of the survey will be released in a joint study.

According to Institute Director of the Fraunhofer Center for International Management and Knowledge Economy IMW, Professor Dr. Thorsten Posselt, and Dr. Marija Radic, head of the institute's Price and Service Management unit, „Big Data has ceased to be a future trend for quite some time, and is regularly used in practice by health insurance companies. It is now essential to build up expertise, to view and use Big Data strategically and to devote personnel and financial resources to this area.“

[The results of the study, including recommendations for action and expert commentary, are available for free download.](#)



PROJECT WINDOW

Success Factors for Crowdfunding in Sport

Leipzig Fraunhofer researchers scientifically support 'crowdFANding - South Curve stays!'

Coinciding with the starting shot of the European Football Championship on June 6th, 2016 at 7:30 pm, the international Crowdfunding campaign „crowdFANding – South Curve Stays!“ kicked off in Jena. Researchers from the Leipzig-based Fraunhofer IMW provided scientific support for the initiative through mid-October 2016. Their goal: to determine the success factors for crowdfunding campaigns in the realm of sports.

Crowdfunding has been developing for some years now into a successful financing alternative for creatives, artists, and young companies, as well as for film and real estate projects. In sports however, this alternative form of participation is still a young financing instrument. Soccer, with its committed, internationally networked fan community, possesses excellent prerequisites for successful crowdfunding campaigns.

Finance experts from the Leipzig Fraunhofer Center provided scientific support with the conception and implementation of the project on behalf of the citizens' initiative „Unser Stadion“ Jena e.V. They analyzed relevant examples of similar national and international campaigns which were successful, moderated the project process and are now conducting research into scientifically based success factors for crowdfunding in sports.

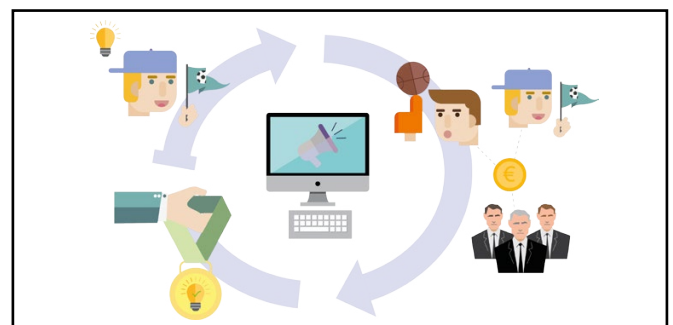
Dr. Robin Bürger leads the team of soccer enthusiasts at the Leipzig Fraunhofer Center: „We - the Innovation Financing unit - explore new avenues for citizen participation. Crowdfunding lends projects a voice. It allows fans and supporters to themselves become participants. This coincides with this year's Fraunhofer motto: People in the center. As a Fraunhofer expert and a member of FC Carl Zeiss Jena, this project was very important to me. We are working to figure out what gaps in sports, especially relating to soccer, crowdfunding can close“.

The support obtained will be fully utilized in the interests of the fans, in this case for the retention of the South Curve at the Ernst-Abbe-Sportfeld. The technical infrastructure for the implementation of the campaign was developed by the Fraunhofer researchers alongside Austria-based Innovation Service Network GmbH, a leading provider of innovative services, and Dr. Willfort, co-founder and CEO of the European Crowdfunding Network. The results of the accompanying scientific research will be released via publications, conference papers and a project summary of the citizens' initiative.

Researchers talk about crowdfunding and FinTech at the largest entrepreneurship conference in German-speaking countries

Dr. Robin Bürger and Erik Ackermann, leaders and scientific employees of the Innovation Financing unit, discussed both crowdfunding and FinTech *at the 20th annual Interdisciplinary Conference on Entrepreneurship, Innovations and SMEs (G-Forum) in Leipzig. In addition to presenting the successfully piloted participation model crowdFANding, which raised €154,000, they also spoke on the perceptions of end customers towards innovative Fintech business models. The largest entrepreneurship conference in German-speaking countries, the G-Forum took place October 5th – 7th 2016, at the HHL Leipzig Graduate School of Management.

* FinTech: Fintech is composed of the words „financial services“ and „technology“ brought together. It is a collective term for the use of modern technologies in the financial services sector.



↑ In crowdfunding money is raised for a project through a variety of donors. The donors can often become involved through contributions starting from as little as € 1. Instead of earning interest or profit sharing, in return the donor usually enjoys either in-kind services or other intangible benefits.

PROJECT WINDOW

START-MIT-NORM

Securing the success of innovative START-ups with STANDARDIZATION

Standardization - alone or in combination with other options such as patenting - can be a key factor in the success of innovative start-ups.

In the research project START-MIT-NORM, a decision making tool has been developed on the basis of theory and best practice examples, to assist start-ups in making the right selection between available instruments and their mixes.

Currently, few young companies use the full potential presented by standardization, either alone or in combination with patenting.

The decision for or against one of these options is often made intuitively by start-ups lacking the relevant information and necessary knowledge. Yet this decision can significantly influence the success of young companies and start-ups

To support start-ups in making the right decision and to ensure their success, the project follows three main aims:

- To collect best practice examples,
- To develop a decision tree in support of the decision process between standardization and patents, whether alone or in a combination,
- Dissemination of the findings.

Research Unit Receives Knut Holt Best Paper Award 2016:

The paper „To standardize or patent? Decision tool for technology start-ups“ was awarded with the Knut Holt Best Paper Award 2016 at the XXVII ISPIM Innovation Conference in Porto, Portugal. Furthermore, the paper will also be published in the International Journal of Innovation (IJIM) in December.

The full paper is available to members of the ISPIM - International Society for Professional Innovation Management at www.ispim.org.

‘To standardize or to patent? Decision tool for technology start-ups’

Nizar Abdelkafi, Sergiy Makhotin, Anna Pohle, Knut Blind, Marina Thuns

Abstract: Young companies need support concerning decisions related to intellectual properties. Entrepreneurs can resort to a menu of strategies, not only patenting. First, we explore the literature on standardization and patenting and relate it to entrepreneurship to identify the internal and external influencing factors as well as the motives and risks related to decision making. Then, we conduct five case studies to explore these influencing factors, while trying to reconstruct the decision making process. We find five main factors: technology, resources, knowledge protection versus knowledge diffusion, need for partnerships, and innovation dynamics. Companies should use patents when their technology is patentable and knowledge protection is essential for survival. Standardization is suitable when knowledge diffusion is more important than protection, and companies look for establishing new partnerships. These insights are integrated into a decision tree that provides guidance to young entrepreneurs to make an informed decision regarding intellectual properties.



The logo for START-MIT-NORM IN features the text 'START-MIT-NORM' in a bold, sans-serif font, followed by 'IN' in a larger, stylized font where the 'I' and 'N' are connected. The entire logo is set against a white background with a thin black border.

START-MIT-NORM is part of the „Innovation with Standards“ (INS) funding project from the Federal Ministry of Economic Affairs and Energy (BMWi)

PROJECT WINDOW

Presentation of Results

START-MIT-NORM

Expert workshops with start-ups

On June 20th, 2016 and August 15th, 2016, the Fraunhofer project team organized two one-day workshops at the German Institute for Standardization in Berlin and the Fraunhofer Center for International Management and Knowledge Economy IMW in Leipzig.

At the workshops, the results of the research project START-MIT-NORM were presented. Participants were drawn from the circles of young companies, business consultants and scholars focusing topics of standardization and patenting. Through their participation they learned about practical examples from projects using a new tool that provides decision support. In addition to lectures by the DIN and Fraunhofer IMW, Jan Ziebarth from Dawico Deutschland GmbH granted insight into the standardization activities of a young IT company and Dr. Markus Brock, an attorney specializing in industrial property rights from Berlin-based SKW Schwarz Rechtsanwälte, advised attendees on the importance and implementation of modern innovation protection.

Individual workshops for young companies and start-up centers:

Would you like to hold an individual workshop on standardization and patenting for young companies? On the basis of our research findings and experience in this area, we will gladly prepare an individualized program on your behalf.

Please contact us at:

start-mit-norm@imw.fraunhofer.de.

Online survey for start-ups:

Have you had a company in the past or are you now active in a young company? Do/did they work with and/or are/were they involved with standardization and patents or their development? We are interested to hear about your practical experiences in this area. Support the project START-MIT-NORM by completing our short online questionnaire.

[To the survey](#)



The Fraunhofer Center for International Management and Management Knowledge Economy IMW leads the START-MIT-NORM project and is the central point of contact.
www.imw.fraunhofer.de



The Fraunhofer Institute for Open Communication Systems FOKUS is working together with Fraunhofer IMW on the START-MIT-NORM project.

www.fokus.fraunhofer.de



The German Institute for Standardization (DIN) initiated START-MIT-NORM and invited tenders for the project.

www.din.de



START-MIT-NORM is part of the project „Innovation with Standards“(INS) by the Federal Ministry for Economic Affairs and Energy (BMWi).
www.bmwi.de

You can find more information on the project website www.start-mit-norm.de.

START-MIT-NORM is a research project by the Leipzig-based Fraunhofer Center from International Management and Knowledge Economy IMW's Business Models: Engineering and Innovation unit. It was initiated as part of the „Innovation with Standards“(INS) funding project within the scope of the High-Tech Strategy of the Federal Ministry of Economic Affairs and Energy (BMWi).

PROJECT WINDOW

accelerapp Provides Support to Companies with International Projects

Market potential and cooperation strategies for VIS Energia's IT solutions



F.l.t.r.: Philip Friebel, Mayra Hartmann, JungTaeg Oah, Wojciech Roskiewicz, Balthasar Kinkel, Malgorzata Krowicka, Wojciech Muras, Lara Kusnezow

The Gdańsk-based company VIS Energia is developing software solutions for the monitoring and management of wind parks. The Research and Business Accelerator unit at Fraunhofer IMW analyzed the applications of their technology on the German market and developed an empirically based market potential and cooperation strategy with recommendations for international applications. In addition, the Fraunhofer experts assisted VIS Energia with their participation in the leading trade fair for wind energy in Europe, which took place in Hamburg. Here, VIS Energia succeeded in gathering feedback from industry experts and gained valuable business contacts upon which to build. The joint project, which was funded by the GoGlobal-Program of the Polish National Center for Research and Development (NCBR), began in April 2016 and was successfully completed on September 30th, 2016.

Developed by Leipzig Fraunhofer researchers, the accelerapp tool shows companies individualized development paths for innovative products, services and technologies on international level markets.

Those planning to introduce new products onto international markets need to do much more than just take a deep breath. The preparation, the process and the management of international research and marketing projects require enormous time, financial and human resources – resources which, especially for small and medium-sized enterprises, are scarce.

[More information on accelerapp](#)

NEW FACES

New Employees at Fraunhofer IMW



Theresa Schmidt

Theresa Schmidt has been working as a research assistant in the Stakeholder Dialogue and Social Acceptance unit at Fraunhofer IMW since August of 2016. Previously, she was also employed as a research assistant at the Leipzig Fraunhofer Center. In 2016, Ms. Schmidt completed her master's degree in economics at the MLU Halle. During her studies, she specialized in the area of sustainability economics and in this context carried out her work with a focus on the environmental economy. In collaboration with the Leipzig Fraunhofer Center, and within the scope of the project „Protecting Cultural Heritage with Fraunhofer Innovations“, Ms. Schmidt completed her master's thesis, in which she focused on concept development for the socioeconomic assessment of cultural heritage.

Haarem Arshad



Hareem Arshad has been a member of the Price and Service Management unit since April of 2016. She completed her Master of Business Administration at the Air University Mutan in Pakistan. Following her degree, she worked as a guest lecturer at the Air University and for the Mobilink Pakistan telecommunications company. Within the scope of her current standing as a German-Academic DAAD scholarship holder, she is conducting PhD research at the Fraunhofer Center for International Management and Knowledge Economy IMW on topics such as frugal innovations in the healthcare sector. She also takes an interest in service innovation and service marketing. In addition to her work at Fraunhofer IMW, Ms. Arshad is also engaged at the University of Leipzig Chair of Business Administration on the subject of frugal innovations with Professor Dubravko Radic.

NEW FACES

New Employees at Fraunhofer IMW

Michaela Schwarzbach



In November of 2016, Dr. Michaela Schwarzbach joined the Professional Development and Competence Management unit at the Fraunhofer Center for International Management and Knowledge Economy in Leipzig. In April 2016, she completed her doctorate on the topic of depression and social networks at the Institute for Social Medicine, Occupational Health and Public Health at the University of Leipzig, where she also worked as a scientist from 2008-2016. As part of her employment, she coordinated several multi-centred projects and also worked with professors from the university course. Prior, she studied psychology at the University of Leipzig.

Dominik Hartmann



Dr. Dominik Hartmann has been working as a scientific assistant at Fraunhofer IMW since October, 2016. Previously, he conducted research as an EU Marie Curie Fellow at the Massachusetts Institute of Technology's (MIT) and University of Hohenheim's media labs from 2014-2016. In his work, Dr. Hartmann examined interdisciplinary networking in the global research landscape as well as the link between economic complexity and sustainable development in more than 120 countries. He holds a Bachelor of Business Administration from the University of Augsburg, a master's degree in International Development from the University of Complutense de Madrid and a PhD in Innovation Economics from the University of Hohenheim. His interest in cultural diversity, interdisciplinary research and global development has brought him to leading research and development institutions in countries such as the United Kingdom (Science Policy Research Unit, Brighton), the Netherlands (Technical University of Eindhoven), Peru (rural development projects with the NGO Desco), Brazil (RedeSist – Federal University of Rio de Janeiro and the Estrela microfinance institute), Chile (Informatics and the Universidade Federico Santa Maria del Mar) and Turkey (Mercator-IPC Fellow on German-Turkish relations at the Istanbul Policy Center, Sabanci). His scientific work has been internationally disseminated via academic journals and publications such as Routledge, Scientometrics, Integration & Trade, Structural Constraints and Economic Dynamics. He also lectures on the topics of innovation management, network analysis and complexity research at the University of Leipzig and supports the Leipzig Fraunhofer Center team with projects relating to international innovation policy and innovation management.

OUR NEW RANGE OF SERVICES

FRAUNHOFER CENTER FOR INTERNATIONAL MANAGEMENT AND KNOWLEDGE ECONOMY IMW

DIVISION CORPORATE DEVELOPMENT IN INTERNATIONAL COMPETITION

Research and Business Accelerator

- Internationalization concepts for research and industrial projects
- International project management for research and industrial projects
- International business/customer development analytics
- Market assessment, market foresight, and market road maps

Business Models: Engineering and Innovation

- Business model engineering and standardization
- Strategic positioning and business model audits
- Business model innovations

Price and Service Management

- Developing innovative revenue
- Price and product optimization
- Development and quality management of services

Professional Development and Competence Management

- Designing and implementing competence management models in SMEs
- „Human Resource Management“ (staff recruitment, staff development and staff planning, work-life balance, preventative work and health management, diversity management, culture-specific human resource management)
- Managing learning processes

Regional Positioning and Location Development

- Location benchmarking and development
- Employer branding at new locations
- Regional branding

DIVISION KNOWLEDGE AND TECHNOLOGY TRANSFER

Professionalization of Transfer Processes

- Organization of knowledge and technology transfer services
- Processes, structures and stakeholders in public transfer funding
- Science communication and “participatory research”

Innovation Financing

- Implementation of funding strategies/ instruments, particularly in the context of EU projects
- Analysis of perfectly suited funding options for innovators and international investors
- Further development and transnational transfer of innovative financial instruments, particularly in the field of environmental innovations

Competitive Intelligence

- Customized solutions for continuous competition monitoring
- Finding and assessing global competitors and experts
- Analysis of fields of technology

Entrepreneurship and Innovation for Development Cooperation

- Promotion of University - Business Linkages
- Entrepreneurship Promotion
- Development of Research and Innovation Centers

DIVISION SUSTAINABILITY MANAGEMENT AND INFRASTRUCTURE ECONOMICS

Energy Management and Energy Economics

- Economic optimization of innovative energy systems
- Modelling and analysis of national and supranational energy markets
- Analysis and design of instruments for energy and climate policy

Stakeholder Dialogue and Social Acceptance

- Development of innovative methods to cope with transformation processes in companies, regions and nations resulting from the energy transition
- Social acceptance research regarding innovative technologies in the energy sector
- Integrated evaluation of infrastructure projects and conducting stakeholder dialogues (taking economic, ecological and social aspects into consideration)
- Designing strategies that make it possible to achieve cooperative solutions in international negotiation processes related to environmental protection

***Research and Development:
Socioeconomically and
Scientifically Based***

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