

HIGHLIGHTS:

*INTERNATIONALIZATION OF THE INSTITUTE,
OFFERS FOR COMPANIES,
CENTRAL AND EASTERN EUROPE IN FOCUS,
OUTLOOK 2015*

DEAR SIR OR MADAM,

Thank you for choosing our MOEZ Newsletter. With our newsletter you will regularly receive:

- reports about our institute's work in the fields of innovation, internationalization and the global knowledge economy,
- background information about current projects,
- interesting product information from our research team
- and fascinating details about the institute's working areas.

Fraunhofer MOEZ has seen dynamic and successful development in the years 2013 and 2014. We have supported numerous companies, ministries and regions in positioning themselves internationally. That has led to further networking with international knowledge hubs. In the institute's immediate surroundings, our researchers have, among other things, analyzed the structures for knowledge and technology transfer in the region of Leipzig. MOEZ is continually combining its essentially economic expertise with the technological competencies of other Fraunhofer Institutes so as to develop excellent, tailor-made solutions for companies and political decision-makers.

Prestigious visiting researchers, e.g. from the USA, Brazil and Poland, regularly enhance the research work with valuable input. The series of public lecture and discussion events has also successfully been continued on the institute's premises, with high-profile speakers from the International Monetary Fund and leading medium-sized companies. Our researchers contribute to international symposia on an ongoing basis, conduct practice-oriented events at companies and host such events on key areas of research, such as German vocational training export, cross-boundary business cooperation, employer branding and innovative financial instruments. You can read reports about this in the annual report of 2013 and in this newsletter.

At this point, besides all the members of staff at our institute, I would particularly like to thank our customers from business and politics. Through the work they commission, they contribute to the positive development of the institute. We would like to express our thanks through our great commitment to securing and further developing the international competitiveness of German and European companies. Your research questions about applied science are what drive us forward. We are looking forward to entering into dialogue with you.

You are welcome to write to us at newsletter@moez.fraunhofer.de.



Yours, Thorsten Posselt
Director Fraunhofer MOEZ



FOCUS ON INTERNATIONALIZATION

Fraunhofer MOEZ is honing its international profile. In his capacity as director of the institute, Dr. Thorsten Posselt signed a cooperation agreement with the South Korean governmental institution Korea Evaluation Institute for Industrial Technology (KEIT) in March 2014. The shared objective: to guide South Korean investments and companies to Germany. At a meeting with Jerzy Margański, ambassador of the Republic of Poland to Germany, the focus was on the Leipzig research institute's projects in Poland. Among other things, the institute supports

Polish companies with technology transfer to Germany. In Tunisia, the institute is continuing to help establish the master's in Innovation Management at the universities in Tunis. Professor Posselt was there regularly in the first half of 2014 as a visiting lecturer. Moreover, the Leipzig research centre was represented at the European Career Fair of Massachusetts Institute of Technology and at the German-French-Polish conference on new approaches to industrial policy in Kraków (Poland). Besides a lecture tour and discussions with the Ministry of

Education in Thailand, Fraunhofer MOEZ also participated with a stand at the "Fraunhofer German-Turkish Days" in Istanbul and accompanied the delegation trip of the Mayor of Leipzig, Burkhard Jung, to South Korea. The international activities of the Leipzig institute reinforce the Fraunhofer-Gesellschaft's measures to open up new markets through international cooperation projects, external consultants and international offices. Fraunhofer MOEZ's focus – supporting companies and regions in positioning themselves within

international markets and in the global knowledge economy – is also demonstrated in practice through its team of staff from more than 15 countries.

NEWSTICKER +++ NEWSTICKER +++ NEWSTICKER

+++ **02.12.2014** [Innovations for agriculture](#), Agricultural and Environment Centre Nossen
+++ **02.12.2014** Lecture [Russia's power - Europe's blackout? Economic integration and interdependence](#), Konrad Adenauer Foundation, Museum of Fine Arts in Leipzig
+++ **09.12.2014** [Employer Branding](#) – Workshop for entrepreneurs, Handelshochschule Leipzig
+++ **21.01.2015** New Year's reception of the Fraunhofer MOEZ and the Fraunhofer IZI, Leipzig
+++ **27.–28.01.2015** [Fraunhofer-Symposium „net value“](#), Fraunhofer-Gesellschaft, Munich
+++ **27.–29.01.2015** [Exhibition for Environment and Energy entrepreneurs](#), Leipziger Messe
+++ **25.–26.02.2015** [international Symposium „Additive Manufacturing“](#), Fraunhofer IWS, Dresden
+++ **11.03.2015** [Saxon Foreign Trade Week: Market entry and Market expansion in the Czech Republic, Poland, Slovakia and Hungary](#), Saxon Development Bank, Dresden
+++ **24.03.2015** Indo-German economic forum for companies, Media Campus Villa Ida, Leipzig

NEWSTICKER +++ NEWSTICKER +++ NEWSTICKER



Daniel W. Bloemers (Fraunhofer MOEZ) at the Korea Institute of Science and Technology Evaluation and Planning in Seoul, South Korea

KNOWLEDGE LEADS TO INNOVATION

ANNUAL REPORT OF 2013 – KNOWLEDGE LEADS TO INNOVATION

The annual report of 2013 gives an overview of Fraunhofer MOEZ's main topics, services, working areas and projects. It reflects the events, findings and developments of the Leipzig research institution in 2013 and its contents also extend into 2014. Director Professor Posselt: "We bridge gaps between business and research and support companies and entire regions in positioning themselves internationally." The ongoing transformation of the institute in the topic areas of innovation, internationalization and the global knowledge economy are likewise described. The annual report can be ordered as a print publication from [Dirk Langolf](#). In addition, it is available for download [here](#).



INNOVATIONS THROUGH STANDARDS AND STANDARDIZATION: GUEST ARTICLE BY PROFESSOR POSSELT IN THE CHAMBER OF INDUSTRY AND COMMERCE MAGAZINE "WIRTSCHAFT" 10/2014

In a [guest article](#) for the [Chamber of Industry and Commerce magazine "wirtschaft"](#), the director of the institute, Dr. Thorsten Posselt, presented the potential of standards and norms. In practice, these are rarely associated with innovations. Companies here overlook the fact that innovations can arise through the implementation and development of norms. The full article on this topic was published in the August edition of Leipzig Chamber of Industry and Commerce's magazine "wirtschaft". [Dr. Nizar Abdelkafi](#) will be at your disposal for any further questions.



CUSTOMER CO-CREATION – THE KEY TO SUCCESS?: INTERVIEW AND PANEL DISCUSSION WITH PROFESSOR POSSELT AT THE 4TH SAXON INNOVATION SUMMIT

During the 4th Saxon Innovation Summit, the director of the institute, Dr. Thorsten Posselt, expressed his thoughts on the current debate about open innovation before participating in the panel discussion "Customer Co-Creation – the Key to Success?": *"It is my observation that cooperation with customers is crucial to the success of companies. Co-creation, the partnership between companies and customers, forms a good basis for developing and implementing successful innovations. Sometimes it is possible to avoid developments that head in the wrong direction or do not meet customers' needs."* The complete [interview](#) has been published on the Fraunhofer MOEZ website.

A DIPLOMATIC PUSH

The German-Russian relations need a policy of détente. The director of the institute, Dr. Thorsten Posselt states in the magazine Unternehmeredition: *"Instead of sanctions, Germany should discuss ways to economically balance interests and obtain a corridor of cooperation with Russia."* The full text is published in the [E-Paper](#) Edition 6/2014.

OFFERS FOR COMPANIES

META-PROJECT ON VOCATIONAL TRAINING EXPORT IS ON THE HOME STRAIGHT: PRACTICE-ORIENTED GUIDELINES ON VOCATIONAL TRAINING EXPORT DEVELOPED FOR COMPANIES

For two years, Fraunhofer MOEZ and experts from diverse fields have been supporting the main phase of the meta-project on the key funding area [“Vocational training export by German educational service providers”](#) of the German Federal Ministry of Education and Research (BMBF). The central goal of the meta-project was to generate scientifically substantiated insights into the export of vocational educational services. These were

to be processed with a practical focus and communicated to export-oriented vocational training service providers in Germany. To this end, the team of researchers at Fraunhofer MOEZ adopted a meta-perspective of collaborative projects and key players in vocational training from November 2012 to October 2014. Through topic-related focus group meetings, academic symposia and three conferences, they were able to network and share their experiences. On the basis of the findings gained and interviews held during the course of the project, Fraunhofer MOEZ has developed practice-oriented guidelines for the most significant key areas of vocational training export. These are available to download [here](#).

The research findings are additionally being passed on in the form of a final report and with recommendations to the BMBF. The meta-project and the guidelines are already now providing the blueprint for further activities on this important cross-disciplinary topic.

WORKSHOPS FOR COMPANIES: HAVING YOUR ATTRACTIVENESS AS AN EMPLOYER TESTED

As of autumn 2014 the department Companies and International Markets at Fraunhofer MOEZ is offering workshops for SMEs regarding their attractiveness as employers in international locations. The workshops are being conducted in cooperation with HHL Leipzig Graduate School of Management within the scope of its Alfried Krupp von Bohlen und Halbach Junior Professorship in International Management. The number of participants is limited. [Michael Benz](#) will also be pleased to receive your suggestions.

When?

December, 9th 2014

Where?

HHL Leipzig, Jahnallee 59, 04109 Leipzig

FRAUNHOFER STUDY DETERMINES INVESTMENT POTENTIAL FOR THE REGION OF LEIPZIG

A [study](#) by Fraunhofer MOEZ has identified and evaluated the most significant target countries for the region of Leipzig. The focus was on industries from diverse regions whose companies were most likely to invest, set up subsidiaries and create jobs in the region of Leipzig. Lutz Thielemann, managing director of Wirtschaftsförderung Region Leipzig GmbH and the one who commissioned the study, explained: “With the information obtained, we can precisely target our marketing efforts for the region of Leipzig to the international investor source markets that are relevant to us.”

SUPPORT FOR SUCCESSFUL MARKET ENTRY IN INDIA

The team of the department Companies and International Markets at Fraunhofer MOEZ supports SMEs from the cleantech sector in [entering the Indian market](#). As of 2014, the Leipzig research institute and the European Business and Technology Centre (EBTC) are offering workshops for companies wanting to expand to India. Moreover, European companies can present their eco-friendly pilot technologies in India on a virtual platform. With these new projects, Fraunhofer MOEZ is continuing its long-standing cooperation with EBTC.



Final conference of the Meta-project vocational training export early October 2014 in Berlin

CENTRAL AND EASTERN EUROPE IN FOCUS

EU PROJECT PRESOURCE: CONCLUDING CONFERENCE DISCUSSED RESOURCE EFFICIENCY IN SMALL AND MEDIUM ENTERPRISES OF CENTRAL AND EASTERN EUROPE

From 12 to 13 November, the capital of Germany provided the backdrop to the concluding conference of the EU project PRESOURCE (Promotion of Resource Efficiency in SMEs in Central Europe). The experience gained and the EDIT VALUE Tool developed by PRESOURCE were to be presented to the expert audience. This innovative instrument enables small and medium enterprises to identify unexploited potential for resource-efficient production. Representatives from the spheres of politics,

finance and research got first-hand information about selected innovative financing models. Equity capital, crowdinvesting and an online lending marketplace for SMEs were here presented as alternatives to loans from local banks and public funding. Furthermore, the conference provided insight into the German, Polish and Austrian funding landscape. Mr. Mumm, owner and founder of the sustainability consultancy pli bonigo, rounded off the event with a fascinating look into the role of sustainability criteria for future investment decisions. You can find more information on PRESOURCE [here](#).



The final conference of the EU project Presource took place on the 12th and 13th of November in Berlin

COMMISSIONER FOR EASTERN GERMANY IRIS GLEICKE: WELL-ORGANIZED CROSS-BORDER COOPERATION IS A REAL CHANCE FOR THE BORDER REGIONS

The Federal Government Commissioner for the New Federal States and Parliamentary State Secretary to the Federal Minister for Economic Affairs and Energy, Iris Gleicke, opened a Fraunhofer MOEZ conference on cross-border cooperation in Frankfurt/Oder on 5 November 2014. At this event, around 100 experts, entrepreneurs and politicians from Germany, Poland and the Czech Republic discussed how successful cooperation in research, development and qualification processes could be achieved

between German, Polish and Czech companies. The conference took place within the context of a research project by Fraunhofer MOEZ in cooperation with ICM – Institut Chemnitzer Maschinen- und Anlagenbau e.V. Detailed information can be found [here](#).



Conference on cross-border cooperation in Frankfurt/Oder

SYMPOSIUM: BUSINESS START-UPS IN THE HUMANITIES AND SOCIAL SCIENCE FIELDS

Traditionally, the focus of government measures to promote start-ups is on technology-oriented and capital-intensive companies. Today, however, start-ups in the humanities and social science fields are gaining ever more economic importance. Together with the University of Wrocław, Fraunhofer MOEZ has focused on a comparative analysis of the start-up and support culture in the humanities and social science fields in Poland and Germany. The results of the project and successful start-up stories were presented by the cross-border team of researchers at a symposium at the Social Impact Lab Leipzig on October 30th, 2014. You can find further information [here](#).

AUFBAU EINES INTERNATIONALEN NETZWERKES FÜR ENERGIE UND UMWELT IM DONAURAUM

Fraunhofer MOEZ is supporting the establishment of an international network for renewable energy and bioecology in the Danube region. Network managers from the Czech Republic, Hungary, Slovakia, the Republic of Moldova, Bulgaria, Romania, Ukraine and Serbia are pooling their expertise with Leipzig's Power and Environment Cluster. The goal: to conduct joint projects and open up new markets. Responsible for [Transnational Renewable Energy Cluster \(TREC\)](#) – Danube are Leipzig's

Netzwerk Energie und Umwelt e.V., the Deutsches Biomasseforschungszentrum (DBFZ) and Fraunhofer MOEZ. TREC Danube was launched with a two-day opening conference in September 2014 at Fraunhofer MOEZ.

FRAUNHOFER PROJECT ACCELERAPP REINFORCES GERMAN-POLISH COOPERATION IN RESEARCH, DEVELOPMENT AND BUSINESS

The [accelerapp](#) project supports Polish companies in the design and implementation of cooperation projects focusing on Germany. The goals: to establish a hub for the exchange of knowledge between Fraunhofer and Polish partners. Pilot projects with Polish companies, in cooperation with universities and research institutions, are to be developed and the project extended to cover further European countries. The Leipzig Fraunhofer Institute launched [accelerapp](#) as a pilot project in 2013. The project partner is the Polish National Centre for Research and Development (NCBR). The staff of Fraunhofer MOEZ are currently supporting Polish companies from the fields of IT, production, medicine and biotechnology with their research and commercialization projects in Germany. Cooperation with additional companies from the manufacturing industry, the energy industry, finance and the IT sector has already been successfully completed.

FRAUNHOFER MOEZ RECEIVES 250 GUESTS FOR A TOUR OF THE WORLD AT THE SCIENCE NIGHT OF 2014

"Around the world in one night" – under this motto, Fraunhofer MOEZ took part in the Long Night of the Sciences (Lange Nacht der Wissenschaften) in Leipzig on 27 June 2014. About 250 guests took the opportunity to get to know a selection of the institute's international projects and get into conversation with the staff. Hands-on activities demonstrated that applied research can be informative and entertaining. Building the "research lab of tomorrow" with LEGO bricks, guessing tree slices in the "forests of Europe", a wheel of fortune on the topic of sustainability in South-East Europe and the virtual tour of the

European Business and Technology Centre ([EBTC](#)) in India all enjoyed great popularity. This year's host of the football World Cup did not miss out, either – in Brazil, football skills were called for. The evening was rounded off with artistic work on the research project [IPONORM](#) and the Tunisian master's programme [DICAMP](#). In a letter to the institute's management, Mayor Burkhard Jung thanked all those involved for a "pleasurable journey" and praised their commitment "as proof of the common identity of Leipzig's sciences". The next Leipzig Long Night of the Sciences is expected to take place in parallel to the institute's ten-year anniversary on June, 24th 2016.



The „researchlab of the future“ at the station LEGO Serious Play

OUTLOOK

BIG DATA CENTER AT FRAUNHOFER MOEZ

The worldwide volume of data doubles every two years. The storage capacity available today will thus be completely exhausted in the year 2020. Solutions are here provided by big data. At Fraunhofer MOEZ a Big Data Center with 150 processors and approximately 350 terabytes of memory capacity is being launched in the second half of the year. The computers that are networked together enable a real-time analysis of price developments and the simulation of market developments. [Lutz Maicher](#) will be pleased to answer any further questions.

AGENT 3D – DIGITAL REVOLUTION IN PRODUCT MANUFACTURING WITH 3D PRINTING TECHNOLOGY

Fraunhofer MOEZ is participating in a research project that is intended to develop 3D printing technologies, laser and electron-beam-assisted manufacturing processes, as key technologies for Germany. The processes are among the most innovative manufacturing processes in industry. By this means, complex components and tools can be produced in a way that is efficient in terms of time and resources. A total of 12 research institutions and 28 companies are involved in the AGENT 3D project (Additive-Generative Manufacturing – The 3D Revolution in Product Manufacturing in the Digital Age).

The project is being conducted from 2014 to 2020 within the scope of the German Federal Ministry of Education and Research's funding programme "Twenty20 – Partnership for Innovation".

FRAUNHOFER MOEZ AS COOPERATION PARTNER OF THE NATIONAL PERFORMANCE CENTRE "CHEMICAL AND BIOSYSTEMS ENGINEERING"

Fraunhofer MOEZ is one of eight institutions of the Fraunhofer-Gesellschaft that are working as cooperation partners of the National Performance Centre "Chemical and Biosystems Engineering" in Leipzig and Halle. Together with six universities and numerous companies, and with the support of the federal states of Saxony and Saxony-Anhalt, they intend to develop central Germany as a centre of research and education. The close networking is to facilitate more cooperative projects in chemical engineering and bioengineering.

FOCUS ON PEOPLE

As a member of the cooperation network "Technology-based Assistance Systems", the Fraunhofer MOEZ group [Strategy and Organization](#) is involved in the development of new and efficient products and services in the health-care industry. The goal: the development of need-based technology and service offerings is intended to facilitate the everyday life of patients, relatives, nursing staff and doctors. The actual core task – the

OUTLOOK

treatment and care of individuals – thus becomes more central again. The Central Innovation Program SME (Zentrales Innovationsprogramm Mittelstand – ZIM) is funding the project.

A COMPARISON OF EUROPEAN TECHNOLOGY RESEARCH

A competition analysis by Fraunhofer MOEZ is intended to provide information about the most efficient research partners in one technology field in Europe. A South Korean research institute has commissioned the Leipzig research institution with this task in order to be able to properly assess the expertise of European cooperation partners in advance. The group [Competitive Intelligence](#) is conducting the analysis.

EU PROJECT "CLIMATE FOR CULTURE": CULTURAL HERITAGE PROTECTION IN TIMES OF CLIMATE CHANGE – RESULTS PRESENTED AT CONCLUDING CONFERENCE

„[Climate for Culture](#)“ can look back on five years of successful cooperation. 27 partners from 14 countries investigated the impact of climate change on the indoor spaces, art collections and future energy requirements of historical buildings. The EU project was coordinated by Fraunhofer MOEZ in cooperation with the Fraunhofer Institute for Building Physics IBP. For the first time, it was possible to connect climate models with building simulations and test those

simulation models in selected royal palaces and churches. The findings put the participating institutions in a position to plan tailor-made strategies for the preservation of their cultural heritage sites. Dr. Kurt Vandenberghe, member of the Directorate-General for Science and Research of the European Commission, praised the results of the research project at the concluding conference in Munich. Furthermore, he presented the focus of the European Commission in the next few years: "We want to develop and invest in an agenda to show that cultural heritage is not a cost, but an opportunity, a production factor of economic value." The host of the two-day conference was the Bavarian Department of State-owned Palaces, Gardens and Lakes. The brochure Built cultural heritage in times of climate change, which presents selected findings from the project, will be available as a PDF download on our website and the project website www.climateforculture.eu as of mid-December. The brochure Built cultural heritage in times of climate change, which presents selected findings from the project, will be available as a PDF download on our [website](#) and the project website www.climateforculture.eu as of mid-December. Please contact [Urban Kaiser](#) for further Inforamtions.

PUTTING BUSINESS MODELS TO THE TEST IN THE SIMULATION LAB

In Fraunhofer MOEZ's simulation lab, companies can have their business model developed and optimized. An effective business model tailored to the company's goals is just as important as the products offered or the technology used. With the data of the company, the industry and similar business models, the group Business Models and Services simulates the company's future development.

FRAUNHOFER RESEARCHER PRESENTS THE POTENTIAL OF SERVICES FOR CLUSTERS AT AN INTERNATIONAL CONFERENCE IN MEXICO

This year's Global TCI Conference in Mexico focused on joint value chains in clusters. There Sandra Dijk, research fellow at Fraunhofer MOEZ, presented the results of her doctoral thesis: in industrial clusters, services can represent competitive advantages for the members, such as through the provision of relevant industry information. In addition, they can be of strategic competitive value to end customers as a product-related service. In her talk, Sandra Dijk described which services were useful for industrial clusters and how a cluster could structure them and systematically plan a service strategy. The Global TCI Conference took place in Monterrey, Mexico, from 10 to 13 November 2014.

FRAUNHOFER RESEARCHERS PRESENT BUSINESS MODEL CONCEPTS AT INTERNATIONAL CONFERENCE IN SERBIA

Products and business models that are to be individually adapted by the customer were the focus of the international conference "[*Mass Customization and Personalization in Central Europe*](#)" in Novi Sad, Serbia. Dr. Nizar Abdelkafi spoke there as a keynote speaker. His talk "Towards the Open School Vision – Co-Creation with Students" presented the findings of a project at Fraunhofer MOEZ: through open innovation, the ideas of students flowed into a new business model. Stephan Melchert presented the jointly compiled paper "Business model opportunities in the case of electric mobility". This paper, which was published in the conference proceedings, discusses two different business model options in electromobility. The conference, which most recently took place from 24 to 27 September, is hosted – every two years – by the Serbian University of Novi Sad.



PD DR. ANNE-KATRIN NEYER APPOINTED PROFESSOR

Since 1 October 2012, PD Dr. Anne-Katrin Neyer, head of the group Strategy and Organization at Fraunhofer MOEZ, has been an acting professor at the Chair of Human Resources Management and Business Governance at Martin Luther University Halle-Wittenberg. On 1 October 2014 she is being appointed university professor for Business Studies there. Dr. Neyer is involved in several organizations and associations. Since 2009 she has been part of the European Academy of Management (EURAM), and since June 2014 she has held the office of Vice President on the Executive Committee of EURAM.



DR. LUTZ MAICHER APPOINTED JUNIOR PROFESSOR

Dr. Lutz Maicher, head of the group Competitive Intelligence at Fraunhofer MOEZ, has held a junior professorship for technology transfer at the Computer Science Faculty of the Friedrich Schiller University of Jena since 1 April 2014. As his main topic, Dr. Maicher, who is establishing a big data centre at MOEZ in Leipzig, focuses on the question as to how IT-based tools can be used and optimized to improve technology transfer. Teaching and applied research complement one another through the fields of work at the Fraunhofer Institute and the University of Jena.



PROFESSOR RADIC APPOINTED AS MEMBER OF THE BOARD OF TRUSTEES OF THE EASTERN EUROPE INSTITUTE IN DRESDEN

Since 1 October 2014, Prof. Dr. Dubravko Radic has been an honorary member of the board of trustees of the Eastern Europe Institute in Dresden (DOI). Radic holds the Professorship for Service Management at the University of Leipzig and is a research officer at Fraunhofer MOEZ. As a non-profit institute, the DOI promotes cultural and political exchange between Germany and various countries from Central and Eastern Europe.

IMPRINT

Publisher:

Fraunhofer MOEZ

Neumarkt 9-19

04109 Leipzig

Editorial Team: Dajana Trapp (responsible editor), Maria Weber, Dirk Langolf (V.i.s.d.P.)

Design: Albrecht Gäbel

In this issue, information was provided by (in alphabetical order):

Adrienne Melde, PD Dr. Anne-Katrin Neyer, Anzhela Preissler, Daniel W. Bloemers, Eleonora Zagorska, Harald Lehmann, Inga Zirkova, Jens Rockel, Karl Täuscher, Lutz Maicher, Marija Radic, Michael Benz, Dr. Nizar Abdelkafi, Dr. Robin Bürger, Sandra Dijk, Steffen Preissler, Steffen Trautwein, Stephan Melchert, Dr. Thorsten Posselt, Urban Kaiser, Wojciech Roskiewicz

The editorial team welcomes suggestions for topics. Next Submission deadline: January 31, 2015.