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PRESS RELEASE

International award for Christoph Leyens

Materials expert from Dresden appointed "Adjunct Professor" in Melbourne

(Dresden, March 7, 2019) Dresden materials expert Christoph Leyens has been appointed Adjunct Professor by the renowned RMIT University in Melbourne, Australia. Leyens is head of the Fraunhofer Institute for Material and Beam Technology IWS and director of the Institute for Materials Science at Dresden University of Technology.

Leyens received the "Adjunct Professor" award for his cooperation with RMIT University with respect to additive manufacturing. In Australia, the term is used as an honorary title for external scientists who are closely associated with a university. In recent years, the materials expert and his teams at the Fraunhofer IWS and TU Dresden have succeeded in setting internationally visible priorities and establishing additive manufacturing as a beacon of science in Dresden. In the Additive Manufacturing Center Dresden (AMCD), operated by Fraunhofer IWS and TU Dresden as a joint expertise center, the scientists interdisciplinarily research and develop material and process solutions for innovative products in order to realize applications in aerospace, energy and medical technology, tools and mechanical engineering as well as automotive technology. With AGENT-3D, AMCD experts also coordinate one of the largest European research projects on additive manufacturing. Together with 120 network partners, this rapidly growing field of technology is being developed into an industrial production process.

Basis for intercontinental research transfer created

"I am delighted to receive this award from RMIT University," says Leyens, "it will further strengthen our international relations with Australia. Sharing of experience among brains is essential in science." As adjunct professor, Leyens supervises for example doctoral students researching in joint doctoral projects at RMIT University and thereby also gain access to research equipment and expertise knowledge from Dresden not available at their own location. In exchange, Dresden scientists will have a simple opportunity for research stays in Melbourne. The great distance between Germany and Australia is only of secondary importance in the cooperation of scientists. "The experts in additive manufacturing meet at conferences all over the world, whether in Dresden

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for our own ISAM 2019 conference, which we have just held very successfully, or in the USA, China or Singapore," the materials scientist from Dresden describes the many occasions for personal meetings. Already in June Leyens travels back to Australia in order to give a lecture on the developments of additive manufacturing in Europe at an international conference in Melbourne during a plenary lecture. He will particularly emphasize the intensive industrial cooperation and the university and non-university research in Germany. These are the cornerstones for the success of German companies in the highly competitive international market.

About RMIT University and Centre for Additive Manufacturing, Melbourne, Australia

RMIT is a global university of technology, design and enterprise. One of Australia's original tertiary institutions, RMIT University enjoys an international reputation for excellence in professional and vocational education, applied research, and engagement with the needs of industry and the community. RMIT University is committed to high impact interdisciplinary research which is highly aligned with that of Fraunhofer IWS. The research on additive manufacturing is delivered through the RMIT Centre for Additive Manufacturing which was established in 2014 to focus upon the new and emerging field of digital additive manufacturing to research and develop new products and processes based on this technology, train future industry and academic leaders in this area and open new horizons for additive manufacturing globally. It is a world-leading research platform in 3D printing, with six professors, four associate professors, three senior lecturers, one ARC Future Fellow, two ARC DECRA fellows and 22 PhD students. A key focus of the Centre research is additive manufacturing of components in advanced materials such as high performance metals, plastics and composites, by moving from the "rapid prototyping" domain to full-scale, production of customised functional final products and parts, directly from design without the need for tooling in the critical path. Targeted industry sectors include biomedical devices, aerospace, defence and mining. The Centre, working closely with Anatomics Pty. Ltd, successfully created Australia's first 3D printed vertebral cage titanium implant in 2015 for a patient with severe back pain.

About IfWW

The Institute of Materials Science (IfWW) at TU Dresden includes four professors appointed to the institute and one associate professor with more than 150 employees. In addition, there are six joint professorships with other institutions (Leibniz and

Fraunhofer Institutes) and four honorary professorships. More than 250 students are enrolled in the Diploma and Bachelor Degree Programs in Materials Science. In addition, the institute offers teaching services for other diploma and master programs of the faculties of mechanical science and engineering, electrical and computer engineering, education, business and economics. The IfWW is headed by Prof. Dr.-Ing. Christoph Leyens, who also holds the Chair of Materials Technology. This position combines basic research in materials science with application-oriented issues. The research results are published internationally and find their way into industrial applications, for example in the aerospace industry, energy and electrical engineering, the automotive industry, rail vehicle construction and medical technology. The Chair of Materials Engineering is a cooperation partner of the Fraunhofer IWS in the Additive Manufacturing Center Dresden (AMCD).

About the Additive Manufacturing Center Dresden (AMCD)

The Additive Manufacturing Center Dresden is an international expertise center that interdisciplinarily develops material and manufacturing solutions for challenging products. It was developed in close cooperation between Fraunhofer IWS, TU Dresden and DRESDEN-concept. At the same time, the Agent-3D project coordinates cooperation with its consortium partners from AMCD. The center of excellence offers an ideal networking platform for industry as well as university basic and application-oriented research in a rapidly developing high-tech field. Activities focus on aerospace, automotive, energy technology, tool and mold making as well as medical technology sectors. The extensive range of processes includes laser cladding with both powder and wire, selective laser beam melting, electron beam melting and 3D printing. In addition, AMCD scientists are developing materials, processes, systems engineering, sensor technology and online process diagnostics.

About AGENT-3D

Leading research institutions, industrial representatives and SMEs are cooperating in the AGENT-3D consortium with more than 120 partners to develop a strategic alliance for research, innovation and growth. The common target is to anchor technological leadership in the central areas for additive manufacturing in Germany. The Federal Ministry of Education and Research is funding the project with up to 45 million euros as part of "2020 - Partnership for Innovation". Prof. Dr.-Ing. Christoph Leyens and Dr. Elena López from Fraunhofer IWS lead the entire consortium at the AMCD site.

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