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## Hans-Jörg Deiseroth on the Occasion of his 75<sup>th</sup> Birthday



Quelle: Universität Siegen

Hans-Jörg Deiseroth studied chemistry at the University of Gießen and followed his academic teacher Hanskarl Müller-Buschbaum to the University of Kiel, where he received his diploma degree for a diploma thesis entitled "Die heterotype Fluoritphase im System CeO<sub>2</sub>/HoO<sub>1.5</sub> und verwandte Verbindungen" in 1969. Three years later he submitted his doctoral thesis "Untersuchungen zur Kristallchemie ternärer Oxogallate" which was supervised by Hanskarl Müller-Buschbaum again. The first publication of Hans-Jörg Deiseroth dates back to these days: in 1970 "Ein Beitrag zur Pyrochlorstruktur an La<sub>2</sub>Zr<sub>2</sub>O<sub>7</sub>" was published in Zeitschrift für Anorganische und Allgemeine Chemie. Interestingly the journals printed F<sub>0</sub>/F<sub>c</sub> tables at that time.

The importance of Solid State Chemistry became more and more obvious in Germany at that time, and a Max Planck Institute for Solid State Research was founded in Stuttgart as a consequence. Arndt Simon came from the University of Münster and was appointed as a director there. Hans-Jörg Deiseroth took his chance and joined this new group as one of the first scientific co-workers of Arndt Simon. This change of the scientific environment and the spirit in this new Max Planck Institute had formative impact on the scientific interests of Hans-Jörg Deiseroth. Thus, he started investigations on tetracyanoplatinates, alkali metal suboxides, and ternary gallium and indium chalcogenides. His habilitation with the topic "Über amorphe und kristalline Chalcogenverbindungen des Galliums und Indiums" followed at the University of Stuttgart in 1982; he was awarded with the venia legendi for Inorganic Chemistry. During this very competitive time for young independent researchers he received a call to the University of Siegen, where he started as a Professor for Inorganic Chemistry in 1985. A new topic emerged in his group: quite exotic alkali metal amalgams were in the focus of his small group and he became immediately famous for his research about these interesting compounds. Hans-Jörg Deiseroth and his family, his wife and three sons, found a house close to the university, a huge advantage of a small city like Siegen. He could focus

on his work and enjoyed the quite strong interaction with his co-workers. Incredibly, a CAD4 diffractometer in his group was controlled by a PDP-8 at that time. For the younger readers: this "computer" was "programmed" by a number of switches instead of a keyboard/terminal. Anyhow, Hans-Jörg Deiseroth made the next step in his scientific career when he accepted a call to the University of Stuttgart where he took the chair for Solid State Chemistry in 1991. Consequently, his group became much bigger and new topics came into his scientific focus: so-called filled  $\beta$ -manganese type phases and intermetallic clusters of main group elements were topics of PhD theses which he supervised during these days. His interest in ion conductors also manifested at that time. In the meantime the colleagues at the University of Siegen found a way how to convince Hans-Jörg Deiseroth to take responsibility for the chemistry department there during difficult times and get him back there, now with much better equipment than during his first years but also with more duties. He was one of the experienced colleagues of the new generation in this still young chemistry department. Despite many administrational duties, he never lost his fascination for basic research and always aimed for a deeper understanding of his observations. It was always clear for him that sophisticated chemical syntheses, physical properties, crystal structures, real structures and theoretical considerations of a new compound have to match concomitantly. His interest in basic research and a careful analysis of close packed tetrahedral phases and related compounds finally ended in the development of a class of materials whose potential as solid electrolytes is not yet fully exploited. Many groups round the world still try to further optimize so-called lithium argyrodites like Li<sub>6</sub>PS<sub>5</sub>X as electrolytes for all-solid-state lithium batteries. Hans-Jörg Deiseroth was the first to synthesize these materials and to suggest them for battery application in his ground-breaking publications; some of them were published in Zeitschrift für Anorganische und Allgemeine Chemie.

Hans-Jörg Deiseroth had a large number of PhD students and other co-workers, who all enjoyed his friendly and helpful

supervision. The same holds for his many colleagues during all the years: it has been always obvious how benign Hans-Jörg is in a personal contact. However, he always has insisted on his goals when it was necessary. The combination of these special traits made him the perfect candidate for many duties, and Hans-Jörg performed quite well as academic teacher, as a friendly supervisor, as a fair referee, as a convincing representative, as a science manager, and last but not least as a friend. Thus, he served as a member of the Studienreformkommission of the Gesellschaft Deutscher Chemiker (GDCh) during the transformation of the old diploma courses to a modern BSc/MSc system, he was chairman of the Fachgruppe Festkörperchemie und Materialforschung of the GDCh, he was an elected referee of the Deutsche Forschungsgemeinschaft and chairman of the board for solid state research, editorial board member of the Zeitschrift für Anorganische und Allgemeine Chemie and co-editor of the Zeitschrift für Kristallographie. After being a vice-rector of the University of Siegen, he became a member of the Hochschulrat of this university, and he is still active in this very responsible position. His contributions in all these different fields have one thing in common: Hans-Jörg always acts to reach the optimum result not for his ego but for the matter he is dealing with.

Dear Hans-Jörg, this short survey is meant to say thank you for your contributions to inorganic and solid state chemistry, for many scientific discussions either as an obvious counterpart or as a referee, for many years as academic teacher, advisor and friend. Your fruitful work is acknowledged by former colleagues and younger researcher, as you can see from the large number of papers dedicated to you!

Herzlichen Glückwunsch zum 75. Geburtstag!

Arno Pfitzner (Regensburg)