

**THIN FILMS**  
DÜNNE SCHICHTEN (DS)

Prof. Dr. Bernd Rauschenbach (DPG)  
Leibniz-Institut für Oberflächenmodifizierung  
Permoserstr. 15  
04318 Leipzig  
bernd.rauschenbach@iom-leipzig.de

Prof. Dr. Klaus Wandelt (EPS)  
Universität Bonn  
Institut für Physikalische und Theoretische Chemie  
Wegelerstr. 12  
53115 Bonn  
k.wandelt@uni-bonn.de

**OVERVIEW OF INVITED TALKS AND SESSIONS**  
(lecture rooms GER 37, GER 38)

**Invited Talks**

DS 2.1	Mon	11:15	(GER 37)	<b>Phase change materials for optical and electronic storage</b> , Ch. Steimer, R. Detemple, H. Dieker, J. Kalb, D. Wamwangi, W. Welnic, M. Wuttig, RWTH Aachen
DS 3.1	Mon	09:30	(GER 38)	<b>X-ray diffraction analysis of residual stress fields in thin films - basic aspects and applications</b> , Ch. Genzel, Hahn-Meitner-Institut, Berlin
DS 6.1	Mon	14:00	(GER 38)	<b>Direct observation of substrate-dependent organic layer growth</b> , E. Umbach <sup>1</sup> , T. Schmidt <sup>1</sup> , A. Schöll <sup>1</sup> , H. Marchetto <sup>2</sup> , H.-J. Freund <sup>2</sup> , R. Fink <sup>3</sup> , <sup>1</sup> University of Würzburg, <sup>2</sup> Fritz-Haber-Institute Berlin, <sup>3</sup> Max-Planck-Gesellschaft, University of Erlangen
DS 8.1	Tue	09:30	(GER 37)	<b>Strained silicon-transistor performance increase with new materials</b> , M. Hecker, L. Zhu, J. Rinderknecht, H. Geisler, E. Zschech, AMD Dresden
DS 11.2	Tue	11:30	(GER 38)	<b>Fluorescence from ultrathin organic films on crystalline surfaces</b> , M. Sokolowski, Universität Bonn
DS 15.1	Wed	15:30	(GER 38)	<b>Nanoparticulate films of high anisotropy magnetic materials: A status quo</b> , B. Rellinghaus, Leibniz-Institut für Werkstofforschung, Dresden
DS 16.1	Thu	09:30	(GER 37)	<b>Ion beam shaping of nanometals</b> , A. Vredenberg, Utrecht University
DS 18.5	Thu	10:30	(GER 38)	<b>Formation and decay of Si/Ge nanostructures at the atomic level</b> , B. Voigtländer, Forschungszentrum Jülich
DS 20.1	Thu	14:00	(GER 37)	<b>Nanostructures by grazing incidence ions: ripple patterns, athermal coarsening and subsurface channeling</b> , T. Michely, RWTH Aachen
DS 23.1	Thu	15:30	(GER 38)	<b>Laser-induced diffusion processes on metal particles</b> , A. Heilmann, Fraunhofer Institute for Mechanics of Materials, Halle (Saale)

**Internal Symposium “Functional Thin Films - Future Applications and Challenges”**

Organisation: Dr. Zschech, AMD Saxony LLC & Co. KG Dresden, and Prof. Dr. D. Schmeißer, BTU Cottbus

DS 5.1	Mon	14:00	(GER 37)	<b>Actual trends in optical coatings</b> , H. Lauth <sup>1</sup> , N. Kaiser <sup>2</sup> , <sup>1</sup> JENOPTIK Laser, Optik, Systeme GmbH, Jena, <sup>2</sup> Fraunhofer-Institut für Angewandte Optik und Feinmechanik, Jena
DS 5.2	Mon	14:45	(GER 37)	<b>New materials approaches for advanced nonvolatile memories</b> , T. Mikolajick, Infineon Technologies Dresden, Dresden
DS 5.3	Mon	15:30	(GER 37)	<b>EUV optical coatings</b> , H. Enkisch, S. Müllander, P. Kürz, Carl Zeiss SMT AG, Oberkochen
DS 5.4	Mon	16:30	(GER 37)	<b>OLEDs: Organic thin film devices for displays and lighting</b> , R. Paetzold, Siemens AG, Erlangen

DS 5.5 Mon 17:15 (GER 37) **Measurement of nanomechanical properties of low-k dielectric films**, H. Geisler, D. Chumakov, L. Jiang, P. Hofmann, C. Streck, U. Mayer, R.-Q. Su, E. Zschech AMD Saxony LLC & Co. KG Dresden

### Internal Symposium “Nanoengineered Thin Films”

Organisation: Prof. Dr. M. Grundmann, Universität Leipzig

This symposium is supported by European Network of Excellence SANDiE

DS 13.1 Wed 14:00 (GER 37) **Adventures in atomic aggregation**, K. Robbie, J. Yang, C. Elliott, C. Buzea, Queen’s University Kingston, Canada

DS 13.2 Wed 14:45 (GER 37) **Ion beam assisted growth of chiral sculptured thin films**, E. Schubert<sup>1</sup>, F. Frost<sup>1</sup>, B. Fuhrmann<sup>2</sup>, F. Heyroth<sup>2</sup>, M. Schubert<sup>3</sup>, B. Rauschenbach<sup>1</sup>, <sup>1</sup>Leibniz-Institut für Oberflächenmodifizierung, Leipzig, <sup>2</sup>Martin-Luther-Universität Halle-Wittenberg, Halle(Saale), <sup>3</sup>University of Nebraska-Lincoln, Lincoln, USA

DS 13.3 Wed 15:30 (GER 37) **Emerging directions in sculptured-thin-film-research**, A. Lakhtakia, Pennsylvania State University, University Park, USA

DS 13.4 Wed 16:30 (GER 37) **From nanostructured ZnO-based thin films to arrays of free-standing nanowires: self-organized growth by pulsed laser deposition**, M. Lorenz, Universität Leipzig

DS 13.5 Wed 17:15 (GER 37) **Self-assembled AlInN nano-grass with intrinsically curved crystal structure**, J. Birch<sup>1</sup>, T. Seppänen<sup>1</sup>, G.Z. Radnoczi<sup>2</sup>, B. Pécz<sup>2</sup>, L. Hultman<sup>1</sup>, <sup>1</sup>Linköping University, Linköping, Sweden, <sup>2</sup>Hungarian Academy of Sciences, Budapest, Hungary

### Lecture of the Gaede Prize Laureate

DS 12.1 Tue 14:00 (TRE Phys) **Understanding scanning tunneling microscopy experiments on transition-metal structures**, S. Heinze, Universität Hamburg

### Sessions

DS 1	<b>Optical properties of thin films I</b>	Mon 09:30–11:00	GER 37	DS 1.1–1.6
DS 2	<b>Optical properties of thin films II</b>	Mon 11:15–12:45	GER 37	DS 2.1–2.4
DS 3	<b>Thin film analysis I</b>	Mon 09:30–11:00	GER 38	DS 3.1–3.4
DS 4	<b>Thin film analysis II</b>	Mon 11:15–12:45	GER 38	DS 4.1–4.6
DS 5	<b>Internal symposium “Functional thin films - future applications and challenges”</b>	Mon 14:00–18:00	GER 37	DS 5.1–5.5
DS 6	<b>Thin film analysis III</b>	Mon 14:00–15:45	GER 38	DS 6.1–6.5
DS 7	<b>Mechanical properties of thin films</b>	Mon 16:00–18:00	GER 38	DS 7.1–7.8
DS 8	<b>Functional thin films I</b>	Tue 09:30–11:00	GER 37	DS 8.1–8.4
DS 9	<b>Functional thin films II</b>	Tue 11:15–13:00	GER 37	DS 9.1–9.7
DS 10	<b>Thin organic films I</b>	Tue 09:30–11:00	GER 38	DS 10.1–10.6
DS 11	<b>Thin organic films II</b>	Tue 11:15–12:15	GER 38	DS 11.1–11.2
DS 12	<b>Lecture of the Gaede Prize Laureate</b>	Tue 14:00–14:45	TRE Phys	DS 12.1–12.1
DS 13	<b>Internal symposium “Nanoengineered thin films”</b>	Wed 14:00–18:00	GER 37	DS 13.1–13.5
DS 14	<b>Growth of thin films</b>	Wed 14:00–15:15	GER 38	DS 14.1–14.5
DS 15	<b>Thin magnetic films</b>	Wed 15:30–17:15	GER 38	DS 15.1–15.5
DS 16	<b>Ion beam solid interaction I</b>	Thu 09:30–11:00	GER 37	DS 16.1–16.4
DS 17	<b>Ion beam solid interaction II</b>	Thu 11:15–12:45	GER 37	DS 17.1–17.6
DS 18	<b>Thin semiconducting films</b>	Thu 09:30–11:15	GER 38	DS 18.1–18.5
DS 19	<b>Thin film deposition and process characterisation I</b>	Thu 11:30–12:45	GER 38	DS 19.1–19.5
DS 20	<b>Ion beam induced nanostructures</b>	Thu 14:00–16:15	GER 37	DS 20.1–20.7
DS 21	<b>Laser and plasma processes</b>	Thu 16:30–18:00	GER 37	DS 21.1–21.6
DS 22	<b>Thin film deposition and process characterisation II</b>	Thu 14:00–15:15	GER 38	DS 22.1–22.5
DS 23	<b>Nanowires, nanoparticles and nanostructures</b>	Thu 15:30–17:30	GER 38	DS 23.1–23.6
DS 24	<b>Poster presentation</b>	Tue 15:00–17:30	P2	DS 24.1–24.79

**Section Thin Films is participated in different joint symposia:****Symposium SYMS:** Magnetic Switching

Monday, March 27, 15:00 - 18:30 h, room: HSZ 04

Organisation : U. Eckern, University Augsburg, and G. Dumpich, University Duisberg

**Symposium SYNW:** Nano Wires

Wednesday, March 29, 14:30 - 18:00 h, room: HSZ 04

Organisation: P. Echenque, University San Sebastian, Spain

**General information:**

All oral presentations are expected in electronic form! Details concerning hard- and software requirements will be sent to the speakers until the beginning of March 2006.

**Meeting of the Members of the Section Thin Films / Dünne Schichten**

Tuesday, March 28, 17:30 h

Room : GER 38

Schedule:

1. Report of the speaker
2. Symposia and invited talks 2007
3. Election
4. Miscellaneous

The meeting of the members of the "Deutschen Vakuumgesellschaft" (DVG) takes place after the meeting of the section Thin Films / Dünne Schichten (DS).