



6th German-French Workshop on Oxide, Dielectric, and Laser Crystals 2017

September 14-15, 2017 - Bordeaux (France)

organized by

CRISTECH - CNRS network on Crystal Growth Technologies

in association with **CMDO - CNRS network on Optical Crystals**

AFC - French Association of Crystallography

DGKK - Arbeitskreis Kristalle für Laser und Nichtlineare Optik



PROGRAM

THURSDAY, SEPTEMBER 14TH, 2017

- 13:00** **Registration and coffee**
- 13:45** **Welcome address – Presentation of ICMCB**
Mario Maglione, Director of ICMCB
Institute of Condensed Matter Chemistry of Bordeaux, 87 avenue Dr Schweitzer, Pessac, France
- 13:50** **Insights about the CRISTECH CNRS Network and the French Crystal Growth Organization at AFC**
Philippe Veber^{1,2,3}
¹ ICMCB, 87 avenue Dr Schweitzer, Pessac, France
² Mission pour l'Interdisciplinarité MI, CNRS, 3 rue Michel-Ange, 75794 Paris CEDEX 16, France
³ Crystal growth transverse axis of the French Association of Crystallography
- 14:05** **Insights about the CMDO CNRS Network**
Bruno Viana^{1,2}
¹ IRCP, ChimieParistech, Paris, France
² Mission pour l'Interdisciplinarité MI, CNRS, 3 rue Michel-Ange, 75794 Paris CEDEX 16, France
- 14:15** **Invited talk 1: Defects in Kyropoulos Ti-doped sapphire for laser applications**
Thierry Duffar
SIMaP-EPM, Saint Martin d'Hères, France
- 15:00** **Combined hydrothermal syntheses for new non-centrosymmetric oxides based on lone pair elements**
N. Barrier¹, M. Poupon^{1,2}, A. Pautrat¹, O. Perez¹, S. Petit¹, A. Hoesz¹, P. Boullay¹
¹ Laboratoire CRISMAT, UMR 6508 CNRS ENSICAEN, CAEN, France
² Institute of Physics of the CAS, Prague, Czechia
- 15:20** **“Cristal Laser SA” nonlinear and electro optics – Elaboration of crystals for use at wide laser power and temperature ranges**
D.V. Balitsky, Ph. Villeval, D. Lupinski
Cristal Laser SA, Messein, France

- 15:40** **Crystal growth and visible laser performance of Pr³⁺-doped hexaaluminate and mellilite type single crystals**
 S. Sattayaporn¹, P. Loiseau¹, G. Aka¹, D. T. Marzahl², C. Kränkel^{2,3}
¹ PSL Research University, Chimie ParisTech, Paris, France
² Institute of Laser-Physics, University of Hamburg, Germany
³ Center for Laser Materials, Leibniz Institute for Crystal Growth, Berlin, Germany
- 16:00** **Coffee break – Poster session**
- 16:30** **Invited talk 2: Controlled oxygen fugacity environment for melt growth of oxide single crystals**
 Steffen Ganschow, Detlef Klimm
 Leibniz-Institut für Kristallzüchtung, Berlin, Germany
- 17:15** **Optical properties of Ba₃Tb(PO₄)₃ single crystals**
 Hengjun Chen¹, Pascal Loiseau¹, Gérard Aka¹, Christian Krankel^{2,3}
¹ PSL Research University, Chimie ParisTech, Paris France
² Institute of Laser-Physics, University of Hamburg, Germany
³ Center for Laser Materials, Leibniz Institute for Crystal Growth, Berlin, Germany
- 17:35** **Investigations on the growth of Delafossite substrate crystals**
 Nora Wolff, Dietmar Siche, Detlef Klimm
 Leibniz Institute for Crystal Growth (IKZ), Berlin, Germany
- 18:00** **Departure for the center of Bordeaux by tramway – Short visit**
- 20:00** **Dinner at « La belle époque » restaurant in Bordeaux**

FRIDAY, SEPTEMBER 15TH, 2017

- 8:30** **Registration – Welcome address**
 Philippe Veber^{1,2,3}
¹ ICMCB, Pessac, France
² Mission pour l'Interdisciplinarité MI, CNRS, Paris, France
³ Crystal growth transverse axis of the French Association of Crystallography
- 08:40** **Invited talk 3: Perfect crystals and epitaxial layers: proposed education of crystal technologists**
 Hans J. Scheel
 General Protection Engineering (GPE) GmbH, Goldswil b. Interlaken, Switzerland
- 09:30** **Surface transformations of SrTiO₃ single crystals upon thermal reduction due to incongruent sublimation**
 C. Rodenbücher¹, P. Meuffels¹, D. Wrana², F. Krok², R. Waser^{1,3}, K. Szot^{1,4}
¹ Forschungszentrum Jülich GmbH, Peter Grünberg Institut and JARA-FIT, Jülich, Germany
² Jagiellonian University, Marian Smoluchowski Institute of Physics, Krakow, Poland
³ RWTH Aachen, Institut für Werkstoffe der Elektrotechnik 2, Aachen, Germany
⁴ University of Silesia, A. Chełkowski Institute of Physics, Katowice, Poland
- 09:50** **Ho-doped lithium niobate thin films of stoichiometric composition**
 N. Kokanyan^{1,2}, E. Kokanyan^{3,4}, T. Aubert^{1,2}, A. Movsesyan^{3,4}
¹ CentraleSupélec, Laboratoire Matériaux Optiques, Photonique et Systèmes (LMOPS), Metz, France



² Université de Lorraine, Laboratoire Matériaux Optiques, Photonique et Systèmes (LMOPS), Metz, France

³ Armenian State Pedagogical University After Kh. Abovyan, Yerevan, Armenia

⁴ Institute for Physical Research, National Academy of Sciences of Armenia, Ashtarak, Armenia

10:10 Direct laser writing double track waveguides inside calcium fluoride crystals

W. Gebremichael^{1,2}, I. Manek-Hönniger¹, Y. Petit^{1,3}, S. Rouzet¹, L. Canioni¹

¹ Centre Lasers Intenses et Applications (CELIA - University of Bordeaux - CNRS - CEA UMR5107), Talence, France

² Amplitude Systèmes, Cité de la Photonique, Pessac, France

³ Institut de Chimie de la Matière Condensée de Bordeaux (ICMCB-CNRS-UPR9048), Pessac, France

10:30 Coffee break – Poster session

11:00 Invited talk 4: Crystal growth and characterization of $\text{YAl}_3(\text{BO}_3)_4$ (YAB) single crystals

V. Wesemann¹, A. Groß¹, M. Golembusch^{1,2}, J. Buchen^{1,3}, S. Dehmelt^{1,2} and D. Rytz¹

¹ FEE GmbH, Idar-Oberstein, Germany

² Hochschule Trier, Umweltcampus, Hoppstädten-Weiersbach, Germany

³ Johannes Gutenberg Universität Mainz, Germany

11:45 Fonctionnally-graded transparent ceramics for laser applications

Rémy Boulesteix^{1,2}, Loick Bonnet^{1,2}, Fabien Bouzat^{1,2}, Alexandre Maître^{1,2}, Rémy Belon^{1,2,3}, Lucie Chrétien^{2,3}, Christian Sallé^{2,3}

¹ Université De Limoges, SPCTS, UMR CNRS 7315, Limoges, France

² Laboratoire De Céramiques Transparentes Pour Lasers (LCTL), Limoges, France

³ CILAS, Orléans, France

12:05 Two dimensional orientation mapping of polycrystalline solar grade wafer

Daniel Brau^{1,2}

¹ Photonic Science Ltd., Milham, Mountfield, Robertsbridge, East Sussex, United Kingdom

² Photonic Science, Saint Etienne de Saint Geoirs, France

12:25 Lunch box

13:45 Visit of ICMCB crystal growth facility



POSTERS

- P1 Energy transfer mechanisms in Eu^{3+} and Tb^{3+} doped $\text{KY}(\text{WO}_4)_2$**
Sebastian Schwung¹, Patrick Pues^{1,2}, Andreas Groß¹, David Enseling², Thomas Jüstel² and Daniel Rytz¹
¹ Forschungsinstitut für mineralische und metallische Werkstoffe (FEE) GmbH, Idar-Oberstein, Germany
² Muenster University of Applied Sciences, Steinfurt, Germany
- P2 Growth and characterization of BaZrO_3 and CaTiO_3 single crystals**
Cong Xin^{1,2}, Philippe Veber², Geetha Balakrishnan³, Monica Ciomaga-Hatnean³, Raphaël Haumont⁴, Romuald Saint Martin⁴, Alain Maillard⁵, Michael Josse², Maël Guennou¹, Daniel Rytz⁶, Mario Maglione², Jens Kreisel¹
¹ Materials, Research and Technology Department, Luxembourg Institute of Science and Technology-University of Luxembourg, Belvaux, Luxembourg
² Institut de Chimie de la Matière Condensée de Bordeaux, CNRS, Université Bordeaux, Pessac, France
³ University of Warwick, Department of Physics, Coventry, United Kingdom
⁴ Institut de Chimie Moléculaire et des Matériaux d'Orsay (ICMMO UMR-CNRS 8182), Synthèse, Propriétés et Modélisation des Matériaux (SP2M), Université Paris-Sud, Orsay, France
⁵ Laboratoire Matériaux Optiques, Photonique et Systèmes (LMOPS) / CentraleSupélec - Metz, France
⁶ Forschungsinstitut für mineralische und metallische Werkstoffe -Edelsteine/Edelmetalle- GmbH, Idar-Oberstein, Germany
- P3 Recent progress in perovskite crystal growth at the IKZ**
Christo Gugushev, Steffen Ganschow, Detlef Klimm, Zbigniew Galazka, Mario Brützam, Isabelle M. Schulze-Jonack, Rainer Bertram, Matthias Bickermann
Leibniz Institute for Crystal Growth (IKZ), Berlin, Germany
- P4 Bulk single crystals of transparent semiconducting oxides**
Z. Galazka, R. Uecker, D. Klimm, S. Ganschow, K. Irmischer, R. Bertram, A. Kwasniewski, R. Schewski, A. Fiedler, M. Albrecht, M. Pietsch, C. Gugushev, M. Bickermann
Leibniz Institute for Crystal Growth (IKZ), Berlin, Germany

More information about the meeting

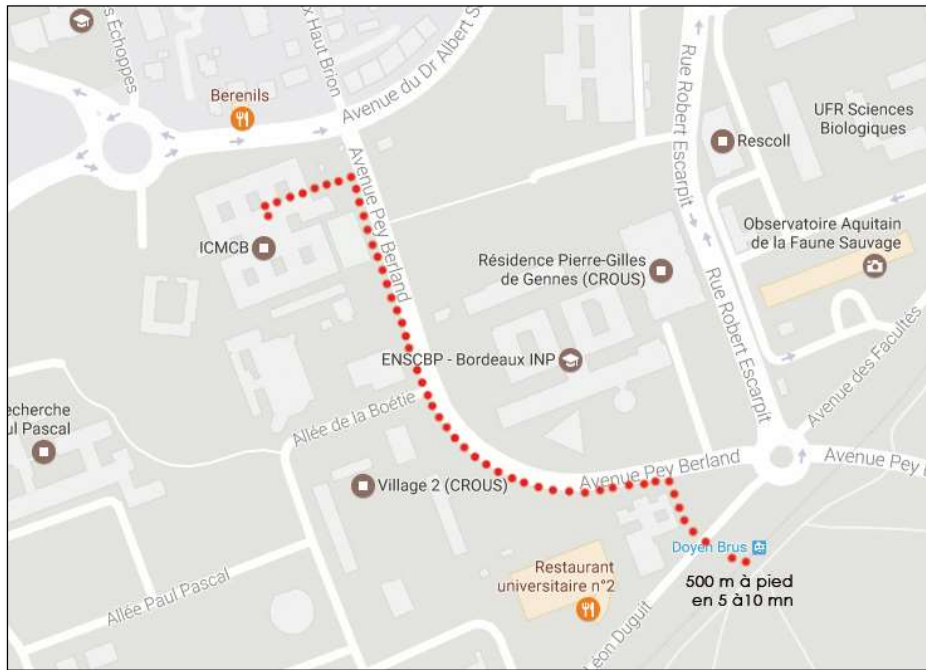
- The seminar room at ICMCB is in the amphitheater. Go to the welcome desk to register you.
- For presenters: Computer, beamer, laser pointer and so on are available. On the other hand, you may bring your own device.
- WIFI is available in the lecture hall.
- The Abstract Book will be available as PDF files at the workshop on a USB key that will be given to you at the welcome desk.
- Lunch box, coffee breaks and dinner are included.
- Registration opens on Thursday at 13 p.m. with welcome coffee in the hall of ICMCB on second floor.
- The dinner event will be held in the restaurant “La belle époque”, Quai Louis XVIII, 33000 Bordeaux. We will go there by tramway starting at the ICMCB (line B “Doyen Brus” station). For those taking accommodation in Teneo, trams are returning every 5-10 minutes.
- We thank our sponsors for making this event possible!

See also all details and updates at: <https://wodil2017.sciencesconf.org/>



Map of Workshop Location GPS : N 44° 48.135' - W 0° 36.879'

<http://www.icmcb-bordeaux.cnrs.fr/spip.php?article160>

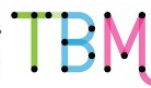


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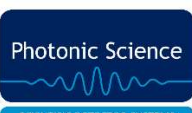
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