

## Sessions at a glance

	Thursday 3rd September	Friday 4th September	Saturday 5th September
<b>8.30 – 10.30</b>	GCOM	NLM	SCI
<b>10.30 – 11.00</b>	Coffee break		
<b>11.00 – 13.00</b>	SCI	SSL	SSL
<b>13.00 – 14.00</b>	Lunch		
<b>14.00 – 15.00</b>	Poster Session 1	Poster Session 2	
<b>15.00 – 16.30</b>	NLM	GCOM	GCOM
<b>16.30 - 17.00</b>	Coffee break		
<b>17.00 - 18.30</b>	GCOM	SCI - GCOM	
<b>20.00 - 23.00</b>		Conference dinner	

### Legenda:

**GCOM:** Growth and Characterization of Optical Materials

**NLM:** NonLinear Materials

**SCI:** Scintillators

**SSL:** Solid State lasers.

**September 3rd 2009**

**Welcome and opening remarks (8.15-8.30)**

**Oral Session 1: Growth and Characterization of Optical Materials (8.30-10.20)**

8.30: *Tsuguo Fukuda:*

**Growth of very large and very small bulk single crystals for optical applications**

9.10: *D. Thangaraju, P. Samuel, S. MoorthyBabu:*

**Growth of two dimensional KGd(WO<sub>4</sub>)<sub>2</sub> nanorods by modified Sol-gel Pechini method**

*Crystal Growth Centre, Anna University-Chennai, Chennai-600025, India.*

9.35: *M. Kucera, K. Nitsch, M. Nikl, J.A. Mares, M. Hanus, S. Danis, Z. Onderisinova, P. Prusa:*

**Effect of flux composition on the structural and emission properties of epitaxial Ce<sup>3+</sup> doped LuAG scintillation films**

*(1) Charles University, Faculty Math. Physics, Prague, Czech Republic (2) Institute of Physics ASCR, Prague, Czech Republic (3) Czech Technical University, Faculty of Nuclear Sciences, Prague, Czech Republic*

9.50: *P.J.R. Montes, M.E.G. Valerio:*

**Production and Characterization of Ca<sub>12</sub>Al<sub>14</sub>O<sub>33</sub> via Proteic Sol-Gel Methodology**

*Department of Physics, Federal University of Sergipe, São Cristóvão-SE, Brazil*

10.05: *F.A. AndradedeJesus, M.R. BarsiAndreeta, A.C. Hernandez , Z.S. Macedo:*

**Bismuth Germanate thin film scintillators produced by Pechini method**

*Physics Department, Federal University of Sergipe, BrazilInstitute of Physics of São Carlos, University of São Paulo, Brazil*

**Coffe break (10.20-11.00)**

**Oral Session 2: Scintillators (11.00-12.55)**

11.00: *K. Yamanoi, T. Shimizu, M. Cadatal, E. Estacio, T. Nakazato, N. Sarukura, Y. Kagamitani, D. Ehrentaut, T.*

*Fukuda, M. Nagasono, T. Togashi, A. Higashiya, M. Yabashi, T. Ishikawa, H. Ohashi, H. Kimura:*

**Improved ZnO Scintillator Temporal Response for XFEL Characterization**

*(1)Inst. of Laser Engineering,Osaka Univ.,Japan(2)RIKEN XFEL Proj. Head Office,Japan(3)Inst. of Multidisciplinary Res. for Adv. Materials,Tohoku Univ.,Japan(4)WPI Adv. Inst. for Materials Res.,Tohoku Univ.(5)Japan Synchrotron Radiation Res.Inst.,Japan*

11.25: *Jun-Lin Yuan , Cheng-Jun Duan , Jiao Wang, Xiao-Jun Wang, Hao-Hong Chen, Dun-Hua Cao, Mu Gu, Jing-Tai Zhao:*

**A New Group of Potential Luminescent Materials: RE<sup>3+</sup>-doped ALnP<sub>2</sub>O<sub>7</sub> and MZnP<sub>2</sub>O<sub>7</sub>-type Pyrophosphates**

*(1) Key Laboratory of Transparent Opto-Functional Inorganic Materials of Chinese Academy of Sciences, Shanghai Institute of Ceramics, Shanghai 200050, P. R. China;(2) Graduate School of Chinese Academy of Sciences, Beijing, P. R. China;(3) Department of P*

11.40: *H. Azechi, Y. Arikawa, T. Nakazato, T. Shimizu, N. Sarukura, M. Nakai, T. Norimatsu, T. Murata, S. Fujino, H. Yoshida, K. Kamada, Y. Usuki, T. Suyama, A. Yoshikawa, N. Satoh, F. Kan:*

**Pr<sup>3+</sup>-doped fluoro-oxide lithium glass as scintillator for nuclear fusion diagnostics**

*(1)Inst.Laser Eng.,Osaka U.,Jpn(2)Tokai U.,Jpn(3)Grad. Sch. Eng.,Kyushu U.,Jpn(4)Ceramic Res.Ctr.Nagasaki,Jpn(5)Furukawa Co.,Ltd.,Jpn(6)Tokuyama Corp.,Jpn(7)Inst.Multidisciplinary Res.for Adv.Mat.,Tohoku U.,Jpn(8)Central.Res.Lab.,Hamamatsu Photon.K.K.,Jpn*

- 11.55: **P. Prusa, J.A. Mares, M. Nikl, M. Kucera, K. Nitsch:**  
**Scintillation properties of LuAG:Ce single crystalline films grown by LPE method**  
 (1)Czech Technical University in Prague, Faculty of Nuclear Sciences and Physical Engineering, Czech Republic(2)Institute of Physics AS CR, Czech Republic(3)Charles University, Faculty of Mathematics and Physics, Czech Republic
- 12.10: **V. Kolobanov, I. Lyakishtva, V. Mikhailin, V. Randoshkin, D. Spassky, N. Vasilyeva:**  
**Exciton creation in GGG single crystalline films**  
 1Synchrotron Radiation Laboratory, Physics Faculty, Moscow State University, 119992 Moscow, Russia2Skobeltsyn Institute of Nuclear Physics, M.V. Lomonosov Moscow State University, 119992, Moscow, Russia3A.M. Prokhorov General Physics Institute RAS,119
- 12.25: **A.C.S. Mello , M.E.G. Valerio, A.B. Andrade, G.H.G. Nakamura, S.L. Baldochi:**  
**Scintillation Mechanism of Tb<sup>3+</sup> doped BaY<sub>2</sub>F<sub>8</sub>**  
 (1)Departamento de Física, Universidade Federal de Sergipe, Brazil(2)Instituto de Pesquisas Energéticas e Nucleares, Brazil
- 12.40: **S. Polosan, A. Galca, M. Secu:**  
**Bi<sub>4</sub>Ge<sub>3</sub>O<sub>12</sub> glass scintillators - ellipsometry and spectroscopy**  
 National Institute of Materials Physics, P.O. box MG-7, Bucharest-Magurele, Ilfov, 077125, Romania

## Lunch

### Poster Session 1 (14.00-15.15)

- PA01: **N. Starzhinskiy, K. Katrunov, B. Grinyov, V. Ryzhikov, L. Gal'chinetskii, I. Zenya, G. Tamulaitis:**  
**Development of II-VI Based Scintillators for Medical and Technical Applications**  
 (1) Institute for Scintillation Materials, 60 Lenin Ave., Kharkiv 61001, Ukraine(2) IMSAR, Vilnius University, Saul279;tekio 9-III, LT-10222 Vilnius, Lithuania
- PA02: **A. Masalov, O. Viagin, O. Sidletskiy, D. Kurtsev, K. Katrunov, N. Starzhinskiy, Y. Malyukin:**  
**The afterglow suppression in LSO:Ce crystals by codoping**
- PA03: **K.S. Bartwal, H. Ryu, M.G. Brik, I. Sildos:**  
**Photoluminescence of Eu<sup>2+</sup> in long-lasting phosphors and electron-vibrational interaction in the Eu<sup>2+</sup> 5d states**  
 (1)Laser Materials Development Devices Division, Raja Ramanna Centre for Advanced Technology, Indore- 452 013, India(2) Korea Research Institute of Chemical Technology, Daejeon- 305-600, South Korea(3) Institute of Physics, University of Tartu, Riia
- PA04: **Wang Yonggang, R.K. Li:**  
**d-d transitions of Fe<sup>3+</sup> ions in Fe<sup>3+</sup>-doped K<sub>2</sub>Al<sub>2</sub>B<sub>2</sub>O<sub>7</sub> crystal**  
 Beijing Center for Crystal Research and Development, Technical Institute of Physics and Chemistry, Chinese Academy of Sciences, Beijing 100190, China
- PA05: **P. Kumar, S. MoorthyBabu, I. Bhaumik, S. Ganesamoorthy, A.K. Karnal, I. Sulania, Praveen Kumar, G.O. Rodrigues, D. Kanjilal:**  
**Nano hillock and complex crater formation by low energy proton implantation in Lithium Niobate**  
 (1). Crystal Growth Centre, Anna University, Chennai, Tamil Nadu 600025, INDIA (2). LMDD Division, RRCAT, Indore – 452013, INDIA (3). Inter-University Accelerator Centre, Aruna Asaf Ali Marg, New Delhi 110067, INDIA

- PA06: **P. Samuel, D. Thangaraju, S. MoorthyBabu:**  
**Effect of Er doping on the optical and vibrational properties of KGd(WO<sub>4</sub>)<sub>2</sub> single crystals**  
*Crystal Growth Centre, Anna University Chennai, Chennai – 600025, INDIA*
- PA07: **M.S. Abdel-sadek, J. RamKumar, S. MoorthyBabu, A.Y. Nooralden, P.K. Palanisamy, M. SalimEl-Hamidy:**  
**Investigation of Linear and Nonlinear Optical Properties of Capped CdTe Nanoparticles by Z-scan Technique**  
*(1)Crystal Growth Centre, Anna University, Chennai-25, INDIA.(2)Centre for Laser Technology, Physics Department, Anna University, Chennai-25, INDIA.(3)Electron Microscope Unit, Dept. of Biological Sciences, Faculty of Science, King Abdulaziz University*
- PA08: **Y.I. Pazura, T.G. Deyneka, E. Vovk, O.M. Vovk, A.V. Tolmachev, R.P. Yavetskiy:**  
**Synthesis and characterization of Y<sub>2</sub>O<sub>3</sub>:Nd<sup>3+</sup> powders**  
*Institute of Kharkov, Ukraine*
- PA09: **D.M. Seliverstov, A.A. Demidenko, E.A. Garibin, S.D. Gain, Y.I. Gusev, P.P. Fedorov, I.A. Mironov, S.B. Michrin, V.V. Osiko, P.A. Rodnyi, A.N. Smirnov:**  
**Scintillation Parameters of BaF<sub>2</sub> and BaF<sub>2</sub>:Ce<sup>3+</sup> Ceramics**  
*(1)-Petersburg Nuclear Physics Institute, RAS 188300, Gatchina, Russia,(2)-Joint-Stock Company INCROM LTD, 193171 St. Petersburg, Russia,(3)-St. Petersburg State Polytechnical University, 195251 St. Petersburg, Russia.(4)-A.M. Prokhorov General Physics*
- PA10: **I. Prytula, V. Gayvoronsky, M. Kopylovsky, M. Kolybaeva, V. Puzikov, A. Kosinova, V. Tkachenko, V. Tsurikov:**  
**Synthesis and nonlinear optical properties of KDP crystals containing nanosized TiO<sub>2</sub>**  
*(1)STC 8220;Institute for Single Crystals8221; National Academy of Sciences of Ukraine,60, Lenin Ave, 61001, Kharkiv, Ukraine(2)Institute of Physics National Academy of Sciences of Ukraine, 46, Nauky Ave., 03680, Kyiv, Ukraine*
- PA11: **Enrico Cavalli, Philippe Boutinaud, Marco Bettinelli, Pieter Dorenbos:**  
**Emission quenching induced by intervalence charge transfer in CaMoO<sub>4</sub> crystals doped with Pr<sup>3+</sup> or Tb<sup>3+</sup>**  
*(1) Dipartimento di Chimica Generale ed Inorganica, Università di Parma, Parma, Italy (2) Laboratoire des Matériaux Inorganiques – UMR 6002, Université Blaise-Pascal et ENSCCF, Aubière, France(3) Laboratorio di Chimica dello Stato Solido, Univer*
- PA12: **C. Gheorghe, A. Lupei, V. Lupei, L. Gheorghe, S. Hau:**  
**Intensity of the f-f transitions of Nd<sup>3+</sup> in CLNGG single crystals**  
*National Institute for Laser, Plasma and Radiation Physics, ECS Laboratory, PO Box MG-36, 077125 Magurele, Bucharest, Romania*
- PA13: **v Lupei, A. Lupei, L. Gheorghe, C. Gheorghe, A. Achim:**  
**Spectroscopic properties of Yb<sup>3+</sup> in new disordered Ca-Li-Nb-Ga and Ca-Li-Nb-Ta-Ga-garnet crystals.**  
*National Institute of Laser, Plasma and Radiation Physics-ECS Lab., 077125 Bucharest-Romania*
- PA14: **E. Volkova, V. Maltsev, N. Tolstik, V. Kisel, D. Ksenofontov, N. Leonyuk, N. Kuleshov:**  
**High-temperature growth and characterization of (Er,Yb):YAl<sub>3</sub>(BO<sub>3</sub>)<sub>4</sub> laser crystals and epitaxial layers**  
*(1)Department of Crystallography CrystallochemistryGeological Faculty, Moscow State University, Russia,(2)Institute for Optical Materials and Technologies, Belarus National Technical University,Belarus*
- PA15: **K. SenthilKumar, R. Perumal, S. MoorthyBabu:**  
**Growth and Characterization of Glycine Phosphite single crystals doped with metal ions**  
*1 Crystal Growth Centre, Anna University-Chennai, Chennai – 600 025, INDIA*

- PA16: **N.V. Klassen, A.V. Shekhtman, O.A. Krivko, E.A. Kudrenko, V.V. Kedrov, I.M. Shmyt'ko, T.N. Fursova, A.V. Bazhenov, V.O. Abramov, N.A. Bulychev, E.B. Yakimov:**  
**Particularities of light emission and structures of oxide nanoscintillators synthesized in electric arc discharge**  
 1) *Institute of Solid State Physics, Russian Academy of Sciences, 142432, Chernogolovka, Russia*, 2) *Institute of General and Inorganic Chemistry, Russian Academy of Sciences, Moscow, Russia* 3) *Institute for Problems of Technology of Microelectronics, Ru*
- PA17: **S.Z. Shmurak, N.V. Klassen, A.P. Kiselev, A.V. Geyer, V.A. Morozov:**  
**Enhancement of light emission from europium molybdate by its structural modifications with addition of sodium**  
 1) *Institute of Solid State Physics, Russian Academy of Sciences, 142432, Chernogolovka, Russia* 2) *Department of Chemistry, Moscow State University, 119992, Moscow, Russia*
- PA18: **N.V. Klassen, O.A. Krivko, T.N. Fursova, A.V. Bazhenov, K.N. Filonov, V.N. Kurlov, V.A. Marchenko, A.G. Znamenskiy:**  
**Particularities of optical properties of thin films with big transverse gradient of dielectric permittivity**  
 1) *Institute of Solid State Physics, Russian Academy of Sciences, 142432, Chernogolovka, Russia* 2) *Institute for Problems of Technology of Microelectronics, Russian Academy of Sciences, 142432, Chernogolovka*
- PA19: **A. Quaranta, G. Battaglin, E. Cattaruzza, F. Gonella, E. Trave, G. Mariotto, G. Peruzzo, C. Sada:**  
**Field-assisted solid state doping of glasses for optical materials**  
 1 *Department of Materials Engineering and Industrial Technologies, University of Trento, via Mesiano 77, 38050 Povo, Trento, Italy* 2 *Physical Chemistry Department, Ca' Foscari University of Venice, Dorsoduro 2137, 30123 Venezia, Italy* 3 *Computer Science Department, University of Verona, strada le Grazie 15, 37134 Verona, Italy* 4 *Physics Department, University of Padua, via Marzolo 8, 35131 Padova, Italy*
- PA20: **P. Haro-González, F. Lahoz, I.R. Martín, S. González-Pérez, N.E. Capuj:**  
**Optical Amplification by upconversion in Tm-Yb fluorindate glass**  
 1 *Dep. de Física Fundamental, Electrónica y Sistemas, 2 Dep. de Física Básica Universidad de La Laguna, Av. Astrofísico Francisco Sánchez, s/n, E-38206 La Laguna, Tenerife, Spain*
- PA21: **J.J. Velázquez, A.C. Yanes, J. DelCastillo, J. Méndez-Ramos, V.D. Rodríguez:**  
**Luminescence properties of transparent sol-gel derived Sm<sup>3+</sup>-Eu<sup>3+</sup> co-doped SiO<sub>2</sub>-LaF<sub>3</sub> nano-glass-ceramics**  
 (1) *Departamento de Física Fundamental y Experimental, Electrónica y Sistemas. Universidad de La Laguna, Spain* (2) *Departamento de Física Básica, Universidad de La Laguna, Spain*
- PA22: **P. Haro-González, I.R. Martín, L.L. Martín, D. Kowalska, J.M. Cáceres:**  
**Crystallization effect on Tm<sup>3+</sup>-Yb<sup>3+</sup> codoped SBN glass ceramic**  
 (1) *Departamento de Física Fundamental y Experimental, Electrónica y Sistemas, University of La Laguna, 38206 La Laguna, Tenerife, Spain.* (2) *Dep. Edafología y Geología, Universidad de La Laguna, 38206 La Laguna, Tenerife, Spain*
- PA23: **P. Haro-González, L.L. Martín, I.R. Martín, A. Martínez-Javaloy, A. Mújica:**  
**Transfer and back transfer processes in Yb<sup>3+</sup>-Er<sup>3+</sup> codoped Strontium Barium Niobate glass-ceramics.**  
 (1) *Departamento de física fundamental y experimental, electrónica y sistemas.* (2) *Departamento de Física fundamental II* (3) *MALTA Consolider Team*
- PA24: **E. Mihokova, L.S. Schulman, M. Nikl:**  
**Temperature effects in the anomalous decay of luminescence: nonlinear breathers and the impact of noise**  
 (1) *Institute of Physics AS CR v. v. i., Cukrovarnicka 10, 16253 Prague, Czech Republic* (2) *Physics Dept. Clarkson University, Potsdam, 13676 NY, USA*

- PA25: **I.M. Shmyt'ko, N.V. Klassen, V.V. Kedrov, N.P. Kobelev, S.Z. Shmurak, E.A. Kudrenko, A.P. Kiselev:**  
**New highly sensitive scintillating materials obtained by condensation of cesium iodide on nanocrystalline seeds from activated oxides**  
*Institute of Solid State Physics, Russian Academy of Sciences, 142432, Chernogolovka, Russia,*
- PA26: **N. Klassen, V. Kedrov, S. Shmurak, I. Shmyt'ko, O. Krivko, A. Ganin, D. McDaniel, J. Voigt, V. Loschenov, V. Volkov:**  
**Particularities of transfer of energy of ionizing radiation absorbed by inorganic nanoscintillators to organic molecules**  
*1)Institute of Solid State Physics, Russian Academy of Sciences, Chernogolovka, 142432, Russia2)General Electric HealthCare, 3000 N, Grandview Blvd, Waukesha, WI 53188, USA3)Institute of General Physics, Russian Academy of Sciences, Vavilova str. 38,*
- PA27: **A. Yoshikawa, T. Yanagida, Y. Yokota, N. Kawaguchi, S. Ishizu, K. Fukuda, J. Pejchal, V. Babin, M. Nikl:**  
**Growth and luminescent properties of Nd:BaY<sub>2</sub>F<sub>8</sub> single crystal for VUV emitting scintillator**  
*1. Institute of Multidisciplinary Research for Advanced Materials, Tohoku University, Sendai 980-8577, Japan 2. Tokuyama, Co. Ltd., Shibuya 3-chome, Shibuya-ku, Tokyo 150-8383 Japan3. Institute of Physics AS CR, Cukrovarnicka 10, 162 53 Prague, Czech R*
- PA28: **Takayuki Yanagida, Mitsuhiro Sato, Kei Kamada, Yutaka Fujimoto, Yuui Yokota, Akira Yoshikawa:**  
**Evaluation of optical properties and gamma-ray responses of Pr:LuAG scintillator for different Pr concentrations**  
*1Institute of Multidisciplinary Research for Advanced Materials, Tohoku University, Sendai, Miyagi, 980-85772 Materials research laboratory of Furukawa, Co. Ltd., 1-25-13 Kannondai, Tukuba Ibaragi, Japan3 New Industry Creation Hatchery Center (NICHe)*

### Oral Session 3: Nonlinear Materials (15.15-16.45)

- 15.15: **K.K. Upendra, R.E. Martin, A. Speghini, F. Piccinelli, L. Nodari, M. Bettinelli, D. Jaque, J. García-Solé:**  
**Second harmonic generation by Niobate nanocrystals**  
*(1)Department of Physics, Sri Venkateswara University Tirupati-517502, India(2)Laboratorio di Chimica dello Stato Solido, DB, Università di Verona and INSTM, UdR Verona, Ca' Vignal, Strada Le Grazie 15, I-37134 Verona, Italy(3)Departamento de Física*
- 15.40: **K. Shimamura, E.G. Villora, M. Aoshima, K. Sumiya:**  
**Ferroelectric Fluoride Single Crystals: Growth and QPM-SHG Emission**  
*1National Institute for Materials Science, 1-1 Namiki, Tsukuba 305-0044, Japan2Hitachi Chemical Co., Ltd., 48 Wadai, Tsukuba 300-4247, Japan*
- 16.05: **L. Gheorghe, P. Loiseau, G. Aka:**  
**400nm blue-violet light production by type-I noncritical phase-matching second-harmonic generation in Gd<sub>1-x</sub>R<sub>x</sub>Ca<sub>4</sub>O(BO<sub>3</sub>)<sub>3</sub> (R = Lu, Sc): crystal growth and nonlinear characterization**  
*(1)National Institute for Laser, Plasma and Radiation Physics, ECS Laboratory, PO Box MG-36, 077125 Magurele, Bucharest, Romania(2)Ecole Nationale Supérieure de Chimie de Paris, LCMCP, CNRS-UMR 7574, 11 rue Pierre et Marie Curie, 75005 Paris, France*
- 16.20: **Noriaki Kawaguchi, Tomohito Nagami, Nobuhito Iida, Kentaro Fukuda, Toshihisa Suyama, Takayuki Yanagida, Yuui Yokota, Akira Yoshikawa, Martin Nikl:**  
**VUV luminescence properties of KMgF<sub>3</sub> and BaF<sub>2</sub>**  
*Tokuyama Corporation Shibuya 3-chome, Shibuya-ku, Tokyo 150-8383 JAPAN.Institute of Multidisciplinary Research for Advanced Materials (IMRAM), Tohoku University, 2-1-1 Katahira, Aoba-ku, Sendai, 980-8577, JAPAN and New Industry Creation Hatchery Center*

### Coffe break (16.45-17.15)

## Oral Session 4: Growth and Characterization of Optical Materials (17.15-18.00)

- 17.15: **Zhi-Jun Zhang, Jiao Wang, Hao-Hong Chen, Xin-Xin Yang, Jing-Tai Zhao:**  
**A New Tungstate-based Potential Scintillator**  
*1 Key Laboratory of Transparent Opto-Functional Inorganic Materials of Chinese Academy of Sciences, Shanghai Institute of Ceramics, Shanghai 200050, P. R. China; 2 Graduate School of Chinese Academy of Sciences, Beijing, P. R. China;*
- 17.30: **M.E.G. Valerio, M.V.S. Rezende, R.M. Araújo, P.J.R. Montes:**  
**Optical properties of rare-earth doped in Sr<sub>3</sub>Al<sub>2</sub>O<sub>6</sub>**  
*Department of Physics, Federal University of Sergipe, Campus Universitário, 491000-000 São Cristovão-SE, Brazil*
- 17.45: **D. Parisi, S. Veronesi, M. Tonelli:**  
**Spectroscopic investigation on La<sub>3</sub>Ga<sub>5</sub>SiO<sub>14</sub>:Er<sup>3+</sup> crystals**  
*NEST-CNR-INFN Dipartimento di Fisica, Università di Pisa - Largo B. Pontecorvo, 3 - I56127 PISA, Italy*

## September 4th 2009

### Oral Session 5: Nonlinear Materials (8.30-10.30)

- 8.30: **Chuangtian Chen:**  
**Deep-ultraviolet harmonic generation and applications**  
*Technical Institute of Physics and Chemistry, Chinese Academy of Sciences*
- 9.10: **W. Bolanos, M. Segura, J. Cugat, J.J. Carvajal, X. Mateos, M.C. Pujol, R.M. Sol. Diaz, M. Aguil Griebner, V. Petrov, G. Lifante, B. Raghochamachar, M. Dudley:**  
**Crystal growth and characterization of epitaxial layers of laser and non-linear optical materials for thin-disk and waveguide laser applications**  
*Physics and Crystallography of Materials and Nanomaterials (FiCMA-FiCNA), Universitat Rovira i Virgili (URV), Campus Sescelades, Marcellimingo s/n, E-43007, Tarragona, Spain  
Max-Born-Institute for Nonlinear Optics and Ultrafast Spectroscopy, 2A Max-Born-Strasse, D-12489, Berlin, Germany  
AdVanced Materials for Integrated Guided Optics (AMIGO), Departamento de Fca de Materiales, Universidad Auta de Madrid, c/ Francisco Tom Valiente No. 7. Ctra. Colmenar Viejo, km. 15, 28049, Cantoblanco, Madrid, Spain  
Materials Science Engineering, State University of New York, Stony Brook, NY-11794, USA*
- 9.35: **Xutang Tao, Weiguo Zhang, Chengqian Zhang, Zeliang Gao, Qingxia Yu, Huaijin Zhang, Minhua Jiang:**  
**Growth and Characterization of the Novel Nonlinear Optical Crystal BaTeMo<sub>2</sub>O<sub>9</sub>**  
*State Key Laboratory of Crystal Materials, Shandong University, Jinan 250100, P. R. China*
- 10.00: **I. Földvári, E. Beregi, K. Lengyel:**  
**Growth and high resolution spectroscopic investigation of YAB:Tm crystal**  
*Research Institute for Solid State Physics and Optics, HAS, Budapest, Hungary*
- 10.15: **P. Molina, M.O Ramirez, L.E. Bausa:**  
**Multidirectional broadband tunable SHG in 2D nonlinear photonic crystals**  
*Dpto. Física de Materiales, Universidad Autónoma Madrid, Spain*

### Coffe break (10.20-11.00)

### Oral Session 6: Solid state Lasers (11.00-13.05)

- 11.00: **A. Lupei, V. Lupei, A. Ikesue, C. Gheorghe, S. Hau:**  
**Nd -> Yb energy transfer in (Nd, Yb):Y<sub>2</sub>O<sub>3</sub> transparent ceramics**  
*(1) National Institute for Lasers, Plasma and Radiation Physics, Lab. ECS, Bucharest R-077125, Romania  
(2) World-Lab. Co. Ltd., Atsuta-ku, Nagoya 456-8587, Japan*

11.25: **P. Camy, Jean-Louis Doualan, A. Benayad, A. Pena-Revellez, V. Mrd, R. Moncorg**  
**Latest developments concerning the Yb:CaF<sub>2</sub> laser system**

11.50: **M.O. Ramirez, J. Wisdom, J. Stitt, A. Ikesue, G. Messing, R.L. Byer, V. Gopalan:**  
**Raman and Fluorescence imaging of grain boundaries in Nd:YAG transparent ceramic lasers**  
*1.- Department of Materials Science and Engineering and Materials Research Institute, Pennsylvania State University, University Park, PA 168022.- Department of Applied Physics, Ginzton Laboratory, Stanford University, Palo Alto, CA 943043.- World-Lab Co., Ltd., Atsuta-ku, Nagoya 456-0023, Japan*

12.15: **G. Galzerano, N. Coluccelli, A. DiLieto, M. Tonelli, P. Laporta:**  
**Wide-tunability solid-state lasers at 1.9  $\mu\text{m}$  for spectroscopy and LIDAR systems**  
*(1) Istituto di Fotonica e Nanotecnologie CNR, Dipartimento di Fisica Politecnico di Milano, Piazza Leonardo da Vinci, 32 20133 Milano, Italy(2) National Enterprise for Nanoscience and nanotechnology INFM CNR, Dipartimento di Fisica Universit Pisa, Largo B. Pontecorvo, 3 56127 Pisa, Italy*

12.40: **Rigo Peters and Klaus Petermann :**  
**Laser materials based on sesquioxides: Growth, spectroscopy and laser properties**  
*Institute of Laser-Physics, University of Hamburg*

## Lunch

### Poster Session 2 (14.00-15.15)

PB01: **M.S. AbdEl-sadek, J. RamKumar, S. MoorthyBabu , M. SalimEl-Hamidy:**  
**Selective Synthesis and Characterization of CdTe@Mn(OH)<sub>2</sub> (Core-Shell) Composite Nanoparticles**  
*(1)Crystal Growth Centre, Anna University, Chennai-25, INDIA.(2)Electron Microscope Unit, Dept. of Biological Sciences, Faculty of Science, King Abdulaziz University, Jeddah-21589, SAUDI ARABIA*

PB02: **R. Perumal, S. MoorthyBabu:**  
**Tailoring Structural perfection and physical properties of Allylthiourea cadmium chloride (ATCC) nonlinear optical single crystals**  
*(1) Crystal Growth Centre, Anna University, Chennai-600025, INDIA*

PB03: **R. Perumal, S. MoorthyBabu:**  
**Analysis on structural, optical and surface features of allylthiourea mercury bromide (ATMB) NLO single crystals**  
*(1) Crystal Growth Centre, Anna University, Chennai-600025, INDIA*

PB04: **D. Kasprowicz, M.G. Brik, A. Majchrowski, E. Michalski, E. Mykowska:**  
**Spectroscopy of KGd(WO<sub>4</sub>)<sub>2</sub> single crystals doped with Nd<sup>3+</sup> and Er<sup>3+</sup> ions**  
*(1) Faculty of Technical Physics, Poznan University of Technology, Nieszawska 13 A 60-965 Poznan, Poland. E-mail: dobkas@phys.put.poznan.pl(2) Institute of Physics, University of Tartu, Riia 142, Tartu 51014, Estonia, E-mail: brik@fi.tartu.ee(3) Insti*

PB05: **F.F. Popescu, V. Bercu, J.N. Barascu, M. Martinelli, C.A. Massa, L.A. Pardi, M. Stefan, S.V. Nistor, M. Nikl, P. Bohacek:**  
**Study of the ground multiplet of Kramers rare earth ions in PbWO<sub>4</sub> scintillator by multifrequency EPR spectroscopy**  
*1)Department of Physics, University of Bucharest, Magurele, RO-077125, Bucharest, Romania; (2)IPCF-CNR, via G.Moruzzi 1, I-56124 Pisa, Italy; (3)National Institute for Materials Physics, POB MG-7 Magurele, RO-077125, Bucharest, Romania; (4)Institute of Ph*



- PB06: **Z. Potucek, S. Stara, H. Malichova, M. Mika, J. Spirkova, Z. Bryknar:**  
**Optical Spectroscopy of Copper Doped Sodium-Zinc Silicate Glass**  
 (1)Faculty of Nuclear Sciences and Physical Engineering, Czech Technical University in Prague, Czech Republic (2)Department of Inorganic Chemistry, (3)Department of Glass and Ceramics, Institute of Chemical Technology, Czech Republic
- PB07: **P. Kumar, S. MoorthyBabu, I. Bhaumik, S. Ganesamoorthy, A.K. Karnal, A.K. Pandey, R. Raman:**  
**Influence of dopant concentration on the structural and optical characteristics in Ti doped LiNbO<sub>3</sub>**  
 (1). Crystal Growth Centre, Anna University, Chennai, Tamil Nadu - 600025, INDIA (2). LMDD Division, RRCAT, Indore - 452013, INDIA (3). Solid State Physics Laboratory, Timarpur, New Delhi – 110054, INDIA
- PB08: **B.V. Shulgin, V.Y. Ivanov, A.N. Tcherepanov, A.V. Ishenko:**  
**The scintillation research in Ural scientific school of luminescence**  
 Ural State Technical University 8211; UPI, Ekaterinburg, Russia
- PB09: **A.Y. Kuznetsov, A.B. Sobolev, A.S. Makarov, M.A. Botov:**  
**Structure of the triplet self-trapped exciton in the LiF crystal: an ab initio periodic HF/DFT study**  
 Ural State Technical University, Mira Str. 19, Ekaterinburg 620002, Russia
- PB10: **K. Srinivasan:**  
**Crystal Growth of Methyl p-hydroxybenzoate - a promising NLO material**  
 Department of Physics, School of Physical Sciences, Bharathiar University, Coimbatore-641 046, TamilNadu, India.
- PB11: **P. Haro-González, L.L. Martín, S. González-Pérez, I.R. Martín:**  
**Formation of Nd<sup>3+</sup> doped Strontium Barium Niobate nanocrystals by two different methods**  
 MALTA Consolider TeamDep. Física Fundamental, Experimental, Electrónica y Sistemas, Universidad de La Laguna, Av. Astrofísico Francisco Sánchez, s/n, E-38206 La Laguna, Tenerife, Spain,
- PB12: **P. Bohacek, L. Havlak, A. Beitlarova, M. Nikl:**  
**A model of absorption and emission centers in PbWO<sub>4</sub> based on molecular vacancies**  
 Institute of Physics AS CR, Prague, Czech Republic
- PB13: **I.R. Martín, P. Haro-González, L.L. Martín:**  
**Analysis of the upconversion mechanisms using a double pulse laser experiment with a variable temporal delay between pulses**  
 MALTA Consolider TeamDep. Física Fundamental y Experimental, Electrónica y Sistemas, Universidad de La Laguna, Av. Astrofísico Francisco Sánchez, s/n, E-38206 La Laguna, Tenerife, Spain, Tel: 0034922318651, Fax: 0034922319228, e-mail: imartin@ull
- PB14: **J.J. Velázquez, V.D. Rodríguez, A.C. Yanes, J. delCastillo, J. Méndez-Ramos:**  
**Structural and spectroscopic characterization of sol-gel derived Dy<sup>3+</sup>-Tb<sup>3+</sup> codoped SiO<sub>2</sub>-LaF<sub>3</sub> nano-glass-ceramics**  
 (1)Departamento de Física Fundamental y Experimental, Electrónica y Sistemas. Universidad de La Laguna. La Laguna Tenerife, Spain (2)Departamento de Física Básica. Universidad de La Laguna. 38206 La Laguna, Tenerife, Spain ayanes@ull.es
- PB15: **Yuui Yokota, Takayuki Yanagida, Akira Yoshikawa, Sumito Ishizu, Noriaki Kawaguchi, Kentaro Fukuda, Martin Nikl:**  
**Growth and VUV Luminescence of Tm doped BaY<sub>2</sub>F<sub>8</sub> single crystal.**  
 Institute of Multidisciplinary Research for Advanced Materials, Tohoku University, 2-1-1, Katahira, Aoba-ku, Sendai, 980-8577, JAPAN Tokuyama Corporation, 6-6-3, Minamiyoshinari, Aoba-ku, Sendai, 989-3204, JAPAN Institute of Physics AS CR v. v. i., Cu

- PB16: **Noriaki Kawaguchi, Kentaro Fukuda, Toshihisa Suyama, Takayuki Yanagida, Yuui Yokota, Akira Yoshikawa, Martin Nikl:**  
**Nd concentration dependence on the optical and scintillation properties of Nd doped BaF<sub>2</sub>**  
Tokuyama Corporation Shibuya 3-chome, Shibuya-ku, Tokyo 150-8383 JAPAN. Institute of Multidisciplinary Research for Advanced Materials (IMRAM), Tohoku University, 2-1-1 Katahira, Aoba-ku, Sendai, 980-8577, JAPAN and New Industry Creation Hatchery Center
- PB17: **Akihiro Fukabori, Takayuki Yanagida, Yuui Yokota, Jan Pejchal, Takayasu Ikegami, Akira Yoshikawa:**  
**Fundamental optical constants of Nd doped Y<sub>2</sub>O<sub>3</sub> ceramics**  
1 IMRAM, Tohoku University, Katahira 2-1-1, Aoba-ku, Sendai 980-0812, Japan 2 National Institute for Materials Science, 1-2-1 Sengen, Tsukuba, Ibaraki 305-0047, Japan 3 NICHe, Tohoku University, 6-6-10 Aoba, Aramaki, Aoba-ku, Sendai, Miyagi 980-8579, Ja
- PB18: **K. Polák, E. Mihóková:**  
**In<sup>+</sup>, Pb<sup>2+</sup> and Bi<sup>3+</sup> in KBr crystal: luminescence dynamics**  
Institute of Physics CAS, Cukrovarnická 10, Prague 6, 162 53, Czech Republic
- PB19: **R.M. Araujo, M.E.G. Valerio, R.A. Jackson:**  
**Computer Simulation of the Substitutional Defect in the Y<sub>3</sub>GaO<sub>6</sub> and Y<sub>3</sub>Ga<sub>5</sub>O<sub>12</sub> and Optical Properties**  
Department of Physics, University Federal of Sergipe, Brazil (1) School of Physical and Geographical Sciences, Keele University, England (2)
- PB20: **F. Rivera-López, Ch. Basavapoornima, P. Babu, V. Venkatramu, C.K. Jayasankar, V. Lavín:**  
**Efficient Nd<sup>3+</sup> → Yb<sup>3+</sup> resonant energy transfer in phosphate glasses for multiple pump channel laser**  
(1) Departamento de Física Fundamental y Experimental, Electrónica y Sistemas. Universidad de La Laguna. E-3820, San Cristóbal de La Laguna, Santa Cruz de Tenerife, Spain, (2) Department of Physics, Sri-Venkateswara University, Tirupati 517 502, Andhra
- PB21: **F. Rivera-López, L. Jyothi, P. Babu, U.R. Rodríguez-Mendoza, C.K. Jayasankar, V. Lavín:**  
**Er<sup>3+</sup>-Yb<sup>3+</sup> co-doped phosphate glasses for 1.5 μm broadband gain medium**  
(1) Departamento de Física Fundamental y Experimental, Electrónica y Sistemas. Universidad de La Laguna. E-38200 San Cristóbal de La Laguna, Santa Cruz de Tenerife, Spain (2) Department of Physics, Sri-Venkateswara University, Tirupati 517 502, Andhra
- PB22: **P. Haro-González, I.R. Martín, L.L. Martín, D. Muñoz, J. Gonzalo, C.N. Afonso, F. Lahoz, N.E. Capuj:**  
**Study of nanostructure distribution of Er<sup>3+</sup>-Yb<sup>3+</sup> codoped on porous silicon thin film**  
MALTA Consolider Team 1 Dep. Física Fundamental y Experimental, Electrónica y Sistemas, University of La Laguna, Av. Astrofísico Francisco Sánchez, s/n, E-38206 La Laguna, Tenerife, Spain 2 Laser Processing Group, Instituto de Optica, CSIC, Serrano 1
- PB23: **L. Havlak, P. Bohacek, M. Nikl, R. Kucerkova, V. Studnicka:**  
**Preparation of Lu<sub>4</sub>Hf<sub>3</sub>O<sub>12</sub> powder samples doped by Eu, Tb, or Bi**  
Institute of Physics AS CR, Prague, Czech republic
- PB24: **C. Pereyda-Pierre, R. Melrez, R. GarcGutiez, V. Chernov, M. Barboza-Flores:**  
**Photo charging effect on the IROSL emission in UV -irradiated SrAl<sub>2</sub>O<sub>4</sub>:Eu<sup>2+</sup>, Dy<sup>3+</sup>**  
Departamento de Investigaci Fca, Universidad de Sonora, A. P. 5-088, Hermosillo, Sonora 83190, Mco
- PB25: **V. Jary, M. Nikl, J. Novak, P. Bohacek:**  
**Luminescence of rare earth ion doped ternary CsLnS<sub>2</sub> compounds**  
Institute of Physics AS CR v. v. i., Cukrovarnicka 10, 16253 Prague, Czech Republic

PB26: **M.E.G. Valerio, M.L. Moreira, D.P. Volanti, P.J.R. Montes, J. Andrés, J.A. Varela, E. Longo:**  
**Radioluminescence and Photoluminescence Properties of Microcrystalline BaZrO<sub>3</sub> Powders, obtained by Microwave-Assisted Hydrothermal Method**  
*a Physics Department, Federal University of Sergipe, São Cristóvão, Sergipe, 49100-000, Brazil b Chemistry Department, Federal University of São Carlos, São Carlos, SP, 13565-905, Brazil c Institute of Chemistry, São Paulo State University, Arara*

PB27: **A. Arcangeli, S. Bigotta, M. Tonelli, J. Zhang, Z.T. Jia, X.T. Tao:**  
**Spectroscopy and cw laser operation of Nd:GAGG garnet laser crystal**  
*(1)Department of Physics, University of Pisa, Italy(2)State Key Laboratory of Crystal Materials and Institute of Crystal Materials, Shandong University, Jinan, China*

PB28: **R. Faoro, F. Moglia, M. Tonelli, E. Cavalli:**  
**Luminescence properties of Ba<sub>2</sub>NaNb<sub>5</sub>O<sub>15</sub> crystals activated with Pr<sup>3+</sup>**  
*(1)NEST, CNR-INFN and Dipartimento di Fisica, Università di Pisa, Largo Pontecorvo 3, 56127 Pisa, Italy (2)Dipartimento di Chimica Generale ed Inorganica, Chimica Analitica e Chimica Fisica, Università di Parma, via GP. Usberti 17/a, 43100 Parma,*

### Oral Session 7: Growth and Characterization of Optical Materials (15.15-16.15)

15.15: **T. Shimizu, M. Cadatal, Y. Furukawa, M. Pham, E. Estacio, T. Nakazato, N. Sarukura, T. Suyama, K. Fukuda, A. Yoshikawa, F. Saito:**  
**290-nm Femtosecond Laser-induced Vacuum Ultraviolet Fluorescence from Nd<sup>3+</sup>:LaF<sub>3</sub>**  
*(1)Institute of Laser Engineering, Osaka University, Japan(2)Tokuyama Corporation, Japan(3)Institute of Multidisciplinary Research for Advanced Materials, Tohoku University, Japan*

15.30: **F. Cornacchia, A. DiLieto, M. Tonelli:**  
**Growth, spectroscopy and diode-pumped laser action of Tm<sup>3+</sup>:LiGdF<sub>4</sub>**  
*NEST - CNR - INFN - Dipartimento di Fisica dell'Università di Pisa, Largo B. Pontecorvo, 3 - I-56127 Pisa, Italy*

15.45: **R.A. Jackson, J.A. Dawson, M.E.G. Valerio, Z.S. Macedo:**  
**Computer modelling of Bi<sub>12</sub>TiO<sub>20</sub>: intrinsic defects, ion migration and rare earth ion incorporation**  
*(1) School of Physical and Geographical Sciences, Keele University, Keele, Staffordshire ST5 5BG, UK(2) Department of Physics, Federal University of Sergipe, 49100-000 São Cristóvão SE, Brazil*

16.00: **V.V. Kedrov, N.V. Klassen, I.M. Shmytko, V.N. Kurlov, S.Z. Shmurak, E.A. Kudrenko, E.B. Yakimov:**  
**Anomalous spatial correlation of borate nanoscintillators grown from melt solutions leading to essential improvement of scintillation parameters**  
*1)Institute of Solid State Physics, Russian Academy of Sciences, 142432, Chernogolovka, Russia,2)Institute for Problems of Technology of Microelectronics, Russian Academy of Sciences,142432, Chernogolovka*

### Coffe break (16.15-16.45)

### Oral Session 8: Scintillators and Growth and Characterization of Optical Materials (16.45-18.05)

16.45: **N.V. Klassen, V.V. Kedrov, I.M. Shmytko, S.Z. Shmurak, O.A. Krivko, E.A. Kudrenko, A.P. Kiselev, A.V. Shekhtman:**  
**Essential improvement of spatial and temporal resolutions of radiation detectors by application of nanoscintillators**  
*Institute of Solid State Physics, Russian Academy of Sciences, 142432, Chernogolovka, Russia,*

17.10: **Akira Yoshikawa, Takayuki Yanagida, Yuui Yokota, Kei Kamada, Yoshiyuki Usuki, Seiichi Yamamoto, Masayasu Miyake, Kazuaki Kumagai, Katsuhisa Sasaki, Mamoru Baba, Masatoshi Ito:**

**Fusion of Optical Material Study and Systems Engineering- Positron Emission Mammography using Pr:LuAG Scintillator -**

*a Institute of Multidisciplinary Research for Advanced Materials, Tohoku University, 2-1-1 Katahira, Aoba-ku, Sendai 980-8577, Japan b Furukawa Co., Inc., 6-1-1 Nijuku, Katsushika-ku, Tokyo 125-0051, Japan c Kobe City College of Technology, Kobe 651-*

17.25: *M. Mortier, P. Aubry, J. Labeguerie-Egea, A. Lybs, P. Gredin, D. Vivien, G. Patriarche:*

**Yb<sup>3+</sup> doped CaF<sub>2</sub> transparent ceramics for laser materials**

*LCMCP, CNRS - Chimie ParisTech, 11 rue Pierre et Marie Curie, 75005 Paris, France LPN, CNRS, Marcoussis, France*

17.50: *Raffaele Faoro, Francesca Moglia, Alessandra Toncelli, Mauro Tonelli:*

**Investigation of rare earth doped BaY<sub>2</sub>F<sub>8</sub> crystals as visible emitters.**

*NEST-CNR-INFN-Dipartimento di Fisica-Universita di Pisa, Largo B.Pontecorvo 3 IT-56127 Pisa Italy*

## September 5th 2009

### Oral Session 9: Scintillators (8.30-10.20)

8.30: *M. Nikl, A. Yoshikawa, A. Vedda, V. Laguta, E. Mihokova, J.A. Mares, K. Nejezchleb, G. Ren, K. Blazek:*

**Bottlenecks in scintillation mechanism of complex oxide scintillators**

*(1)Institute of Physics AS CR v. v. i., Cukrovarnicka 10, 16253 Prague, Czech Republic(2) IMRAM, Tohoku university, 2-1-1 Katahira, Aoba-ku, Sendai, 980-8577, Japan(3)Dip. di Scienza dei Materiali, Università di Milano-Bicocca, via Cozzi 53, 20125 Mi*

9.10: *H. Ogino, A. Yoshikawa, M. Nikl, E. Mihokova, A. Vedda, J. Shimoyama, K. Kishio:*

**Improvement of scintillation properties of Lu<sub>3</sub>Al<sub>5</sub>O<sub>12</sub>-based single crystals scintillators by Ga admixture**

*(1)School of Engineering, The University of Tokyo(2)IMRAM, Tohoku University(3)Institute of Physics AS CR(4)Dip. di Scienza dei Materiali, Università di Milano-Bicocca*

9.35: *A. Quaranta, S. Carturan, T. Marchi, A. Antonaci, C. Scian, V.L. Kravchuk, M. Degerlier, F. Gramegna, G. Maggioni, G. DellaMea:*

**Doping of polysiloxane rubbers for the production of organic scintillators**

*1 Università di Trento, Dipartimento di Ingegneria dei Materiali e delle Tecnologie Industriali – DIMTI, via Mesiano 77, 38050 Povo, Trento, Italy2 INFN, Laboratori Nazionali di Legnaro, via dell'Università 2, 35020 Legnaro, Padova, Italy*

9.50: *A. Begnamini, D. Niznasky, R. Kucerkova, M. Nikl:*

**Luminescent properties of Lutetium silicates synthesized by sol gel method**

*(1)Faculty of Science, Charles University of Prague, Czech Republic(2)University of Studies of Pavia, Italy(3)Institute of Physics AS CR v.v.i*

10.05: *Gomes Maria de Andrade, Mário Ernesto Giroldo Valerio, Zélia Soares Macedo:*

**Rare earth doped scintillators produced via a coconut water-assisted sol-gel method**

*Physics Department, Federal University of Sergipe, Brazil*

### Oral Session 10: Solid state Lasers (11.00-13.05)

11.00: *Hiroshi Fujioka:*

**Development of room temperature epitaxial growth technique for nitride optical devices**

*(1) Institute of Industrial Science, The University of Tokyo, 4-6-1 Komaba, Meguro-ku, Tokyo 153-8505, Japan*

- 11.25: **P.O. Petit, B. Viana, Ph. Goldner, F. Balembos, F. Druon, P. Georges:**  
**Controls of the thermal effect in the near infrared lasers**  
 LCMCP-ENSCP 11 Rue PM Curie 75231 Paris Cedex 05 France Lab. Charles Fabry de l'Institut d'Optique, Campus Polytechnique, RD 128, 91127 Palaiseau
- 11.50: **G. Boulon, S. Hraiech, Y. Guyot, A. Jouini, K. JinKim, A. Yoshikawa:**  
**Role of Na<sup>+</sup> Cations in Yb<sup>3+</sup>-doped CaF<sub>2</sub> Laser Crystals**  
 1 Physical Chemistry of Luminescent Materials, Université de Lyon, Claude Bernard/Lyon1 University, UMR 5620 CNRS, 69622 Villeurbanne, France 2 IMRAM, Tohoku University, 2-1-1, Katahira, Sendai 980-8577, Japon
- 12.15: **J.I. Mackenzie, J.W. Kim, L. Pearson, W.O.S. Bailey, Y. Yang, W.A. Clarkson:**  
**Cryogenically-cooled two-micron solid-state lasers: Recent results and future prospects**  
 1 Optoelectronics Research Centre, University of Southampton, Highfield, Southampton SO17 1BJ, UK 2 School of Engineering Sciences, University of Southampton, Highfield, Southampton SO17 1BJ, UK
- 12.40: **F. Moglia, E. Heumann, R. Peters, G. Huber:**  
**Advances in semiconductor-laser-pumped high-power upconversion lasers**  
 Institute of Laser-Physics, University of Hamburg, Germany
- 12.55: **X. Mateos, R. Solé, M.C. Pujol, J.J. Carvajal, M. Aguiló, F. Díaz:**  
**Laser operation of Nd<sup>3+</sup> in the acentric KGd(PO<sub>3</sub>)<sub>4</sub> crystal**  
 Física i Cristal·lografia de Materials i Nanomaterials (FiCMA-FiCNA). Universitat Rovira i Virgili (URV), 43007-E Tarragona, Spain.

## Lunch

### Oral Session 11: Growth and Characterization of Optical Materials (15.00-16.40)

- 15.00: **N. Leonyuk:**  
**New borate materials for lasers and active photonic devices**  
 Department of Crystallography Crystal Chemistry, Lomonosov Moscow State University, Russia
- 15.25: **A. Gektin, N. Shiran, Y. Boyarintseva, A. Boyarintsev:**  
**Modification of NaI:Tl scintillator properties by Eu doping**  
 Institute for Scintillation Materials, Kharkov, Ukraine
- 15.40: **A. Lauria, N. Chiodini, M. Fasoli, E. Mihokova, F. Moretti, A. Nale, M. Nikl, A. Vedda:**  
**Structural evolution and morphology of scintillating Ce- and Pb-doped Strontium Hafnate powders**  
 (1) Dept. Materials Science, University of Milano-Bicocca, Via Cozzi 53, 20125 Milano, Italy (2) Institute of Physics AS CR v. v. i., Cukrovarnicka 10, 16253 Prague, Czech Republic
- 15.55: **E. Mihokova, A. Vedda, F. Moretti, M. Fasoli, M. Nikl, M. Bettinelli, A. Speghini, H. Ogino, A. Yoshikawa:**  
**The effect of Ga on carrier trapping in Eu-doped Lu<sub>3</sub>Al<sub>5</sub>O<sub>12</sub> crystals and powders**  
 (1) Dip. di Scienza dei Materiali, Università di Milano-Bicocca, via Cozzi 53, 20125 Milano, Italy (2) Institute of Physics AS CR v. v. i., Cukrovarnicka 10, 16253 Prague, Czech Republic (3) Laboratorio di Chimica dello Stato Solido, DB, Università di Ve
- 16.10: **F. Somma, R.M. Montekali, M.A. Vincenti, S. Polosan, M. Secu:**  
**Crystal growth and optical characterization of Pb, Tl doped LiF crystals**  
 1 Third University of Rome, Physics Dep., V. della Vasca Navale, 84, Rome, ITALY 2 ENEA, FIM Dep., C.R. Frascati, V. E. Fermi 45, 00044 Frascati (Rome), ITALY 3 National Institute of Materials Physics, Bucharest-Magurele 077125, ROMANIA

16.25: *E.M. Maddock , R.A. Jackson , M.E.G. Valerio:*

**Computer modelling of intrinsic defects and rare earth doping in  $\text{KYF}_4$ ,  $\text{K}_2\text{YF}_5$  and  $\text{KY}_3\text{F}_{10}$**

*(1) Lennard-Jones Laboratories, School of Physical and Geographical Sciences, Keele University, Keele, Staffordshire, ST5 5BG, UK(2) Physics Department, Federal University of Sergipe, Campus Universitario, 49100-000 São Cristovão, SE, Brazil*

**Conclusions (16.40)**