

## **(12) Ferroics**

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### DETAILED PROGRAMME

Monday, 16-12-2013

#### Session I : 10.15 – 11.15

10.15 - 10.45 Invited Talk (1)	<u>Satoshi Wada,</u> Hideto Kawashima, Yoshinobu Hirose, Shuhei Tsukamoto, Shintaro Ueno, Kouichi Nakashima and Nobuhiro Kumada	<b>ABS - Email - ICA</b> Dielectric and Piezoelectric Enhancement of Barium Titanate-based Nano-structured Ceramics with Heteroepitaxial Interfaces
10.45-11.00 Oral (1)	<u>Ravindra Singh Solanki,</u> S.K. Mishra Shane J. Kennedy, Anatoliy Senyshyn, Y. Kuroiwa, C. Moriyoshi, T. Suzuki, I. Ishii and Dhananjai Pandey	<b>ABS - 30 - ICA</b> Ground state of $(Pb_{0.94}Sr_{0.06})(Zr_xTi_{1-x})O_3$ in and around the morphotropic phase boundary region
11.00-11.15 Oral (2)	<u>Sushil Kumar Singh,</u>	<b>ABS - 117 - ICA</b> Enhanced Functionality of Bismuth Ferrite Thin Films: Nanostructure and Doping Effect

#### Session II : 11.45 – 13.15

11.45 - 12.15 Invited Talk (2)	Summayya Kouser, Jaita Paul, Anil Kumar, Takeshi Nishimatsu, Y. Kawazoe, Karin M Rabe and <u>Umesh V. Waghmare</u>	<b>ABS - Email - ICA</b> First-principles theory of Structural Transitions and Domain Structures in Bulk and Nano-scale Ferroelectrics
12.15-12.30 Oral (3)	<u>S. Ganesanpotti and</u> H. Kageyama	<b>ABS - 83 - ICA</b> $Ca_2FeCoO_6$ : A novel Ferromagnetic Double Perovskite
12.30-12.45 Oral (4)	<u>O.P. Thakur,</u> L. Radhapiyari Devi, Anand Kumar and Akhilesh Pandey	<b>ABS - 285 - ICA</b> Deposition, Structural and Electrical Characterization of PZT Films on Si Substrates for MEMS Applications
12.15-13.00 Oral (5)	Ashok Bhakar, A.N.Pandey Tapas Ganguli, S.M. Gupta, A.K. Sinha, M.N. Singh, A. Upadhyay and S.K. Deb	<b>ABS - 1634 - ICA</b> Synchrotron based X-Ray Diffraction and Dielectric Studies of $PbMg_{1/3}Nb_{2/3}O_3$ Powders Prepared under Different Sintering Conditions
13.00-13.15 Oral (6)	Hsin-Jou Lin, Jow-Lay-Huang, Sean Wu, Ding-Fwu Lii	<b>ABS - Email - ICA</b> Characterization and piezoelectric properties of reactively sputtered highly A-axis ScAlN thin films on diamond structures

### Session III : 16.00 - 18.00

16.00 - 16.30 Invited Talk (3)	<u>Nobuo Nakajima</u> , Shuhei Kawakami and Hiroshi Maruyama	<b>ABS - Email - ICA</b> Local origin of the ferroelectric moment in SrTiO <sub>3</sub> : real space and energy space studies
16.30 - 16.45 Oral (7)	<u>Akhilesh Kumar Singh</u> , Rishikesh Pandey, Ashish Tiwari and Ashutosh Upadhyay	<b>ABS - 761 - ICA</b> Phase Coexistence and the Structure of the Morphotropic Phase Boundary Region in (1-x)Bi(Mg <sub>1/2</sub> Zr <sub>1/2</sub> )O <sub>3</sub> -xPbTiO <sub>3</sub> Piezoceramics
16.45 - 17.00 Oral (8)	<u>Vidhya G. Nair</u> , V. Subramanian and P.N. Santhosh	<b>ABS - 900 - ICA</b> Structural, magnetic and dielectric studies of YbFe <sub>0.5</sub> Cr <sub>0.5</sub> O <sub>3</sub>
17.00 - 17.15 Oral (9)	<u>S. Ganesamoorthy</u> , I. Bhaumik, R. Bhatt, N. Subramanian, A.K. Karnal, P.K.Gupta, S.Takekawa and K.Kitamura	<b>ABS - 1018 - ICA</b> Dielectric and Ferroelectric Hysteresis Studies of Sr <sub>x</sub> Ba <sub>1-x</sub> Nb <sub>2</sub> O <sub>6</sub> Crystals
17.15 - 17.30 Oral (10)	Sudipta Goswami, Dipten Bhattacharya, Wuxia Li, Ajuan Cui, Qian Qing Jiang and Chang-zhi Gu	<b>ABS - 1172 - ICA</b> Direct measurement of multiferroic coupling on a trained nanochain of BiFeO <sub>3</sub>
17.30 - 17.45 Oral (11)	<u>M.Sakar</u> , S.Balakumar and S.N. Jaisankar	<b>ABS - 1212 - ICA</b> Manifestation of Multiferroic Bismuth Ferrite Nanofibers and Nanobelts by electrospinning method
17.45 - 18.00 Oral (12)	<u>Ranjeet S.</u> , Bhagyashree K.S. and S.V. Bhat	<b>ABS - 1346 - ICA</b> EPR and Magnetic Investigations of Nanoparticles of La <sub>2</sub> NiMnO <sub>6</sub>

**Tuesday, 17-12-2013**

### Session IV : 11.45 – 13.15

11.45 - 12.15 Invited Talk (4)	Somdutta Mukherjee, Rajeev Gupta, and <u>Ashish Garg</u>	<b>ABS - Email - ICA</b> Gallium Ferrite: A near room temperature Multiferroic Material
12.15 - 12.30 Oral (13)	<u>Bhavya Bhushan</u> , Amiya Priyam, N.Y. Vasanthacharya and D. Das.	<b>ABS - 1460 - ICA</b> Equimolar Co-doping by Ca, Ba Ions; A Step towards Enhanced Functionality of BiFeO <sub>3</sub> Multiferroic Nanoparticles

12.30 - 12.45 Oral (14)	R.M. Sarguna, V. Sridharan, Suresh Bhardwaj, A.M. Awasthi, M.D. Mukadam, S.M. Yusuf and N. Subramanian	<b>ABS - 1561 - ICA</b> Structural, dielectric and magnetic studies on Y-substituted $\text{GdMnO}_3$
12.45-13.00 Oral (15)	Durgesh Kumar and <u>Chandana Rath</u>	<b>ABS - 441 - ICA</b> Unusual magnetic properties in nanoparticles of $\text{CoCr}_2\text{O}_4$ multiferroic: Neutron diffraction, Diffused neutron scattering and EXAFS analysis
13.00-13.15 Oral (16)	<u>Savita Sharma</u> , Monika Tomar, Nitin K Puri and Vinay Gupta	<b>ABS - 676 - ICA</b> Multiferroic Properties of $\text{BiFeO}_3/\text{BaTiO}_3$ Multilayered Thin Films

**Poster Session :**  
**Monday, 16-12-2013, 14.00 - 15.30**

12 - Poster - 01	Rishikesh Pandey and Akhilesh Kumar Singh	Studies on Crystal Structure and Electrical Properties of Multiferroic $(1-x)\text{Bi}(\text{Ni}_{1/2}\text{Ti}_{1/2})\text{O}_3\text{-xPbTiO}_3$ Solid Solution across the Morphotropic Phase Boundary	<b>ABS - 49 - ICA</b>
12 - Poster - 02	Shidaling Matteppanavar, Basavaraj Angadi, S.K. Deshpande, V.H. Doddamani, Sudhindra Rayaprol	Low Temperature Dielectric Studies on $\text{PbFe}_{0.5}\text{Nb}_{0.5}\text{O}_3$ Multiferroics	<b>ABS - 75 - ICA</b>
12 - Poster - 03	Sandip G. Kakade, R.N. Chikhale and Y. D. Kolekar	Magnetic behavior of Erbium doped CFO Prepared by auto combustion	<b>ABS - 300 - ICA</b>
12 - Poster - 04	Poonam Pahuja, R.P. Tandon and Chandra Prakash	Multiferroic Composite System with Barium Strontium Titanate and Nickel Cobalt Ferrite as Constituents	<b>ABS - 537 - ICA</b>
12 - Poster - 05	Pratibha Singh, J.K. Kuneja, K.K. Raina and Chandra Prakash	Ferroelectric Behaviour of Mn-Substituted Modified PZT	<b>ABS - 537a - ICA</b>
12 - Poster - 06	Praveen Kumar, J.K. Juneja, K.K. Raina and Chandra Prakash	Diffused Phase Transition in NB-doped BLPTZ Ceramics	<b>ABS - 537b - ICA</b>
12 - Poster - 07	Pawan Kumar and Manoranjan Kar	Enhanced Magnetic Properties of Eu and Mn co-doped Bismuth Ferrite	<b>ABS - 565 - ICA</b>
12 - Poster - 08	Reetu Dahiya, Ashish Agarwal	Crystal structure refinement, magnetic and dielectric properties of Sr and V co-doped $\text{BiFeO}_3$	<b>ABS - 667 - ICA</b>

12 - Poster - 09	S. Shankar, Manish Kumar, Om Prakash	Electrical properties of $\text{BiFeO}_3\text{-BaTiO}_3$ ceramics	<b>ABS - 710 - ICA</b>
12 - Poster - 10	Ashutosh Upadhyay and Akhilesh Kumar Singh	Structural characterization of piezoelectric $(1-x)\text{Bi}(\text{Mg}_{1/2}\text{Ti}_{1/2})\text{O}_3\text{-xPbTiO}_3$ ceramics in the morphotropic phase boundary region	<b>ABS - 772 - ICA</b>
12 - Poster - 11	C. Saranya S. Vinodh Kumar S. Seenithurai, R. Kodi Pandyan and M. Mahendran	Magnetic Response of Nickel Ferrite Nanoparticles Prepared by Sol-gel Method	<b>ABS - 838 - ICA</b>
12 - Poster - 12	Tanveer Quazi, Kamal Singh, S. A. Acharya, P.R.Chaudhari	Structural, Magnetic and dielectric behaviour of Lead iron niobate (PFN) with Lead borate glass as sintering aid	<b>ABS - 905 - ICA</b>
12 - Poster - 13	Shreeja Pillai, T.Sripathi, and Vilas Shelke	Interface engineering for enhanced magnetic behavior in multiferroic $\text{BiFeO}_3$	<b>ABS - 915 - ICA</b>
12 - Poster - 14	Uttam Kumar Chanda, Ganesh Kumar Sahoo, Ranabrata Mazumder	Effect of Sm doping on dielectric and magnetic properties of microwave sintered $\text{BiFeO}_3$ ceramic	<b>ABS - 1037 - ICA</b>
12 - Poster - 15	N. Shara Sowmya, K. Prabakhar, S.V.Kamat and A. Srinivas	Effect of processing route on magnetic and electrical properties of multiferroic Bismuth Ferrite	<b>ABS - 1078 - ICA</b>
12 - Poster - 16	A.Rambabu, E.Sivangi Reddy, and K.C. James Raju	Tuning Properties of Ferroelectric Thin Films through variation in Oxygen Mixing Percentage during deposition	<b>ABS - 1137 - ICA</b>
12 - Poster - 17	Anil Tumuluri, K.C. James Raju	Raman imaging of $\text{LiNbO}_3$ thin films for phase mapping	<b>ABS - 1161 - ICA</b>
12 - Poster - 18	Mukesh Kumari, Chandra Prakash, Ratnamala Chatterjee	Effects of $\text{Fe}_2\text{O}_3$ substitution on electrical and magnetic properties of lead free $\text{Bi}_{0.5}\text{Na}_{0.5}\text{TiO}_3$ ceramics	<b>ABS - 1245 - ICA</b>
12 - Poster - 19	Mukesh Kumari, Amrita Singh, Arti Gupta, Chandra Prakash, Ratnamala Chatterjee	Investigations on magnetoelectricity in lead free piezoelectricmagnetostrictive bilayered composite ceramics prepared via. co-sintering method	<b>ABS - 1245a - ICA</b>
12 - Poster - 20	S. Sasanka kumar, A.C. Saritha, Subinthomas and M.K. Jayaraj	Diagnosis on ferroelectric PZT plasma using Langmuir probe for depositing Pervoskite thin films	<b>ABS - 1282 - ICA</b>
12 - Poster - 21	G. Venkataiah, K. Raju, R.S. Joshi D.H. Yoon and P.S. Anil Kumar	Strain mediated magnetoelectric coupling in $\text{NiFe}_2\text{O}_4\text{-BaTiO}_3$ multiferroic composite	<b>ABS - 1339 - ICA</b>

12 - Poster - 22	K. Shirasagar S. H., Jigajeni S.R., Salunkhe S. M, Sutar M.M, Kokare S.R, Joshi P.B	Magnetoelectric and Magnetodielectric Characterization of $\text{La}_{0.67}\text{Sr}_{0.33}\text{MnO}_3$ - $\text{Ni}_{0.85}\text{Zn}_{0.1}\text{Co}_{0.05}\text{FeO}_4\text{-Sr}_{0.5}\text{Ba}_{0.5}\text{Nb}_2\text{O}_6$ Composites.	<b>ABS - 1365 - ICA</b>
12 - Poster - 23	Dumal Swati, Tarale A. N., Mane S. S., Chavan S.D., Joshi P. B. and Salunkhe D. J.	Dielectric and Magnetodielectric properties of $\text{Ba}_{0.95}\text{Sr}_{0.05}\text{Ti}_{(1-x)}\text{Fe}_{(x)}\text{O}_3$ and $\text{Ba}_{0.95}\text{Sr}_{0.05}\text{Ti}_{(1-x)}\text{Co}_{(x)}\text{O}_3$ .	<b>ABS - 1385 - ICA</b>
12 - Poster - 24	Subhash Sharma, Vikash Singh and and R.K. Dwivedi	Structural, Optical and Dielectric studies of $(0.95)\text{Pb}(\text{Zr}_x\text{Ti}_{1-x}) - (0.05)\text{BiFeO}_3$ nanoceramics	<b>ABS - 1388 - ICA</b>
12 - Poster - 25	M. Muneeswaran and N.V. Giridharan	Synthesis and characterization of nano sized $\text{Bi}_{1-x}\text{Pr}_x\text{FeO}_3$ ceramics	<b>ABS - 1402 - ICA</b>
12 - Poster - 26	C. Nayek and P. Murugavel	Memory effect in Ba and Ti co-doped $\text{La}_{0.7}\text{Sr}_{0.3}\text{MnO}_3$ nano materials	<b>ABS - 1458 - ICA</b>
12 - Poster - 27	Harishchandra Singh, A.K. Sinha, Haranath Ghosh, M.N. Singh, Anuj Upadhyay, S.K. Deb	Synthesis and structural characterization of $\text{Co}_{3-x}\text{Mn}_x\text{TeO}_6$ ; ( $x=0.3, 0.5, 0.8, 1, 2$ ) solid solutions using Synchrotron source	<b>ABS - 1633 - ICA</b>
12 - Poster - 28	Mane S.S., Tarale A.N., Chavan S.D., Joshi P.B., Salunkhe D.J.	Magnetoelectric and Magnetodielectric Properties of $\text{La}_{0.7}\text{Sr}_{0.3}\text{MnO}_3$ and $0.5\text{Ba}_{0.7}\text{Ca}_{0.3}\text{TiO}_3\text{-}0.5\text{BaZr}_{0.2}\text{Ti}_{0.8}\text{O}_3$ Composite	<b>ABS - 1637 - ICA</b>
12 - Poster - 29	P. Murugavel, Arnab Pal, Chiranjib Nayek and Ch. Thirmal	Structure and tuneable dielectric properties of $(1-x)\text{BaTiO}_3\text{-}x\text{LaMnO}_3$ compound	<b>ABS - 1638 - ICA</b>
12 - Poster - 30	Hsin-Yi Lee, Shang-Jui Chiu, Ge-Ping Yu	Characteristic of Multiferroic $\text{BiFeO}_3/\text{SrTiO}_3$ Superlattices Prepared by RF Sputtering	<b>ABS - Email - ICA</b>
12 - Poster - 31	S.K. Ghosh, M.Ganguly S.K. Rout, T.P. Sinha	Influence of Lanthanum addition on optical and dielectric relaxor properties of barium zirconium titanate $(\text{Ba}_{1-x}\text{La}_{2x/3})(\text{Zr}_{0.3}\text{Ti}_{0.7}\text{O}_3)$	<b>ABS - Email 1 - ICA</b>
12 - Poster - 32	S.K. Ghosh, M. Gunguly S.K. Rout, T.P. Sinha	Optical and dielectric relaxor properties of rare earth Samarium doped $(\text{Ba}_{1-x}\text{Sm}_{2x/3}) (\text{Zr}_{0.3}\text{Ti}_{0.7}\text{O}_3)$ ceramics	<b>ABS - Email 2 - ICA</b>