

"Dissemination of Education for Knowledge, Science and Culture"

--- Shikshanmaharshi Dr. Bapuji Salunkhe

Shri Swami Vivekanand Shikshan Sanstha, Kolhapur's

Post-Graduate Department of Physics

Raje Ramrao Mahavidyalaya,

Jath, Dist: Sangli (Maharashtra State) India 416404.

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Advances in Materials Science**

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"ज्ञान, विज्ञान आणि सुसंस्कार यांसाठी शिक्षणप्रसार"

... शिक्षणमहर्षी डॉ. बापूजी सांळुखे



शिक्षणमहर्षी डॉ. बापूजी सांळुखे

संकल्पक, संस्थापक श्री स्वामी विवेकानंद शिक्षण संस्था, कोल्हापूर.

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एम.एस्सी., पीएच्.डी.

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Vice-Chancellor



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NAAC 'A' Grade
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MESSAGE

I am very happy to know that Rajee Ramrao College, Jath, Dist. Sangli is organizing an International Conference on Advances in Materials Science (ICAMS-2016) on 7th and 8th December, 2016. I am also happy to know that research papers on the theme of the Conference will be published in the form of proceedings having "ISBN Number".

I congratulate the Principal and all his colleagues for organizing the Conference on this very important topic. I am sure that the main theme and sub themes will be widely discussed and the participants will have meaningful interaction and exchange of information during the course of the International Conference.

I wish the International Conference a grand success.

Kolhapur
Date: 28/11/2016


(Devanand Shinde)
Vice-Chancellor



“ज्ञान, विज्ञान आणि सुसंस्कार यांसाठी शिक्षण प्रसार” - शिक्षणमहर्षी डॉ. बापूजी साळुंखे
Estd. June 1955

Reg. No. K.E. 95

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Late Dr. Bapuji Salunkhe**
B.A.B.T.D. Lit.
Promoter-Founder

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M.A.
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Prin. Sou. Shubhangi M. Gawade
M.Sc.B.Ed.
Secretary

Outward No. : 9552

Message

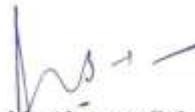
Date : 28 NOV 2016

The department of Physics of Raje Ramrao Mahavidyalaya, Jath is going to organize an International Conference on Advances in Materials Science on 7th and 8th December 2016. Now a days, Materials Science is a booming field of research. Majority of the well known and popular research in 20th century is emerged from materials science research. Various types of materials with varying particle sizes from mini to nano size can be prepared and utilized for various industrial applications.

The conference proposes to cover a wide range of themes which are emerging branches of this important subject. It is a matter of pride that six scientists from Japan have agreed to participate and share their ideas in the conference. It is also a historic event that the college like Jath is going to have an International MoU with Tokyo University, Japan. It is a matter of pride to the college as well as to Shri Swami Vivekanand Shikshan sanstha.

I am sure that the theme of conference will provide meaningful platform to the researchers and all the participants to exchange their experiences and ideas. The guidance given by eminent researchers will be an intellectual treat to the delegates.

I wish the international conference a grand success.


(Prin. Abhaykumar Salunkhe)

Chairman,
Shri Swami Vivekanand Shikshan Sanshta,
Kolhapur



''ज्ञान, विज्ञान आणि सुसंस्कार यांसाठी शिक्षण प्रसार'' - शिक्षणमहर्षी डॉ. बापूजी साळुंखे

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Prin. Abhaykumar Salunkhe

M.A.

Chairman

Prin. Sou. Shubhangi M. Gawade

M.Sc.B.Ed.

Secretary

Outward No. : 9553

Message

Date 28 NOV 2016

I am very much happy to know that the department of Physics of Raje Ramrao Mahavidyalaya, Jath is going to organize an International Conference on Advances in Materials Science on 7th and 8th Dec.2016. I appreciate the endeavor of the college to shoulder the responsibility of organizing an International Conference. The presence of six scientists from Japan is an excellent opportunity to the delegates participating in the seminar. I feel proud that during the seminar the college is signing an MoU with Tokyo University, Japan. It is really an honor to the college and Shri Swami Vivekanand Shikshan Sanstha, Kolhapur.

I hope, the meaningful discussions will take place on the theme and the discussions will be beneficial to the delegates. The conference will serve as a platform for young researchers, faculty members and resource persons for exchanging latest information and innovations in materials science.

I wish the International Conference a grand success.

(Prin. Mrs. Shubhangi M. Gawade)

Secretary,
Shri Swami Vivekanand Shikshan Sanstha,
Kolhapur

Estd : June 1969



“ ज्ञान, विज्ञान आणि सुसंस्कार यांसाठी शिक्षणप्रसार ”

शिक्षणमहर्षी डॉ. बापूजी साहूंचे

Shri Swami Vivekanand Shikshan Sanstha, Kolhapur's

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(Affiliated to Shivaji University, Kolhapur)

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Ref. No. : RRMJ /

Date : 29/11/2016

Message

It is a matter of great pride that the Department of Physics of our college has organized an International Conference on "Advances in Materials Science (ICAMS-2016)" on 7th & 8th Dec. 2016. Organising an International Conference is a historic event in the history of this college. I am very happy to place before you the proceedings of this seminar.

I express my sincere thanks to Prin. Abhaykumar Salunkhe, Chairman, Shri Swami Vivekanand Shikshan Sanstha, who inspired and guided us all the way in organising this wonderful event. I am also thankful to Prin. Mrs. Shubhangi Gavade, Secretary, Shri Swami Vivekanand Shikshan Sanstha, for her valuable guidance and motivation to undertake this activity successfully. My thanks are due to the resource persons, authors of research papers and participants for their valuable contribution in the conference.

Dr. S. Y. Hongekar
Principal

Raje Ramrao Mahavidyalaya
Jath, Dist. Sangli.

From the Desk of Convenor....



At the outset let me welcome you all for the International conference on Advances in Materials Science. The department of physics is established in this college with the inception of Science faculty in 1989. In the first half decade students of this department were eager to access the laboratory and it has been overcome by Ramkrushna Paramhans College, Osmanabad and Dr. Bapuji Salunkhe College, Miraj. Late Principal P.B. Chanvan, Principal Ashokrao Jagtap and Late Principal Veersingh Ingale have concentrated their time to develop the science faculty of this college in general and Physics department in particular. At the end of first decade department was shifted from old historic building to new building constructed for the classrooms. Now Once again the department is on the way of shifting to the new building constructed for laboratory purpose only.

During last decade the department has flourished with his active teaching and research. Suvarna Masane, Pushpa Chavan, Manoj Joshi, Atul More, Suresh Sawant, Chidanand Kanamadi, Satyappa Jigjeeni, Sanjeev Dalawai, Parashuram Abhange, Bhanudas Kokare, Balasaheb Vankhande, Suresh Bamane, Suman Pattanshetti, Priyanka Chavan, Sima Chavan, Sneha Chavan, Gafur Naik, Nanasahab Hakke, Priyanka Deokar, Arati Kulkarni, Deepali Chougule, Sohan Thombare and many other are our pride alumni.

The Department is recipient of many academic awards including the research funding from Shivaji University, Kolhapur, University Grant Commission, New Delhi, Department of Science and Technology, New Delhi, Consumer Ministry, Government of India, New Delhi. Four students have already obtained their M.Phil. degree from this centre. Department is an approved research centre for Ph.D. course of Shivaji University from June 2014. One student has submitted his Ph.D. thesis and few more are in pipeline.

The addition of Dr. Sanjay Latthe, as a faculty in the department, has not only filled the gap but boosted the others staff and student to explore them in the field of research. Organisation of this International conference may not be his brain child but without him, his contribution and devotion it would not be possible to organise such a big event at this rural and remote place. The efforts taken by Sanjeev Dalwai, Treasurer of this conference are not only appreciable but it becomes a lesson for new incomers' in the field of research. Authorities of Shri Swami Vivekanand Shikshan Sanstha, Kolhapur has kind enough to grant the permission for the organisation this conference. Principal, Teaching and Nonteaching Staff of College has taken painful efforts to bring the conference at the level of Success.

Further this year only we are started the post graduate course in Physics and this becomes the first post graduate course in the history of our college. A historic batch of 16 students of Master course is my backbones in organising the conference. Many undergraduate students have spared their time and worked voluntarily.

At the last once again welcome you all in the campus of Raje Ramrao Mahavidyalaya. Hope that you will have a good stay, fruitful discussion and sweet memories of this event for future.

A handwritten signature in black ink, appearing to read 'Shrikant R. Kokare'.

Dr. Shrikant R. Kokare,

Head, Post Graduate Department of Physics,
Raje Ramrao Mahavidyalaya, Jath (SANGLI)

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From the Desk of Secretary...

Good afternoon. It is matter of great pleasure to welcome and thank you all for gathering in first *International Conference on Advances in Materials Science* (ICAMS-2016) organized by Department of Physics, Raje Ramrao College, Jath. During my second visit to Tokyo University of Science, Japan through 'SAKURA Exchange Program in Science' I had requested Prof. Chiaki Terashima to visit Department of



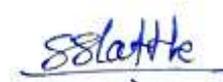
Physics, Raje Ramrao College, Jath. He not only agreed for the same but also kindly agreed to sign a MoU between Tokyo University of Science, Tokyo, Japan and Raje Ramrao College, Jath, India. The worldwide renowned scientist and currently President of Tokyo University of Science Prof. Akira Fujishima, Prof. Chiaki Terashima and me collected a fund of 92, 000 Japanese Yen from which we are starting a meritorious prize for B.Sc. and M.Sc. students on the name of "*Fujishima-Terashima Award*".

It is very much heartening to see the overwhelming response received for the conference from the research community for its very first edition. A good number of distinguished professors and researchers have also agreed to deliver keynote addresses/invited talks in the conference. Young scholars participating in the conference will immensely benefit from these. Present conference will be dedicated to discuss on newer technologies in materials science and will also try to provide a platform to young researcher for their futuristic academic achievements. I am confident that this conference will provide a concrete platform which will encourage and support scholars, researchers and faculty to carry and accomplish their research goals.

I could see the amount of efforts put in by the faculty in organizing this conference in this institute with minimal infrastructure of its own. The technical program committee chair and team did an excellent job in ensuring acceptance of only quality works as part of the conference. The conference received 167 papers and after reviews, only 120 were accepted. We hope that you find the ICAMS proceeding rewarding.

I feel fortunate enough for having a strong support from Prof. S. Y. Hongekar, Principal, Raje Ramrao College, Jath and Dr. Shrikant R. Kokare, Head, Department of Physics. Both of them gave me full liberty to carry out the things smoothly.

Once again welcome to ICAMS-2016.

A handwritten signature in blue ink, appearing to read 'S. Latthe'.

Dr. Sanjay S. Latthe



Thank you message from Tokyo University of Science

The International Conference on Advances in Materials Science (ICAMS-2016) held on 7th to 8th December, 2016 at Raje Ramrao College (Jath, India) was the most established conference for all researchers and young students in advanced materials science.

ICAMS-2016 was nicely organized by the Post-Graduate Department of Physics in Raje Ramrao College and our participants give special thanks to Dr. Sanjay Latthe (Secretary), Dr. Shrikant Kokare (Convener) and Dr. S.Y. Hongekar (Principal).

Among the ICAMS-2016, we had the memorable ceremonies of a Japanese Fujishima-Terashima Award as well as Memorandum of Understanding (MoU) between Photocatalysis International Research Center in Tokyo University of Science and Department of Physics in Raje Ramrao College. From Japanese side, I, Associate Professor Chiaki Terashima, five students of Mr. Takahiro Adachi, Kensuke Katagishi, Yusei Sakurai, Aiga Hara, and Kazuya Miyasaka attended to the ceremonies and the ICAMS-2016, and we would like to offer our thanks for all organizing members and supporting staff as well as all of the participants.

I really enjoyed to attend to ICAMS-2016 and visit to Raje Ramrao College in Jath, India.

With best wishes,

Associate Professor **Chiaki TERASHIMA**

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December, 2016