



**Spring 2016 | Milwaukee**  
The Concrete Convention  
and Exposition

**ACI INTERNATIONAL FORUM**  
Sunday, April 17, 2016  
10:00 AM – 11:30 AM, C-202 B

# **Evolving Role of the India Chapter of ACI – with the changing INDIAN ECONOMIC SCENARIO**

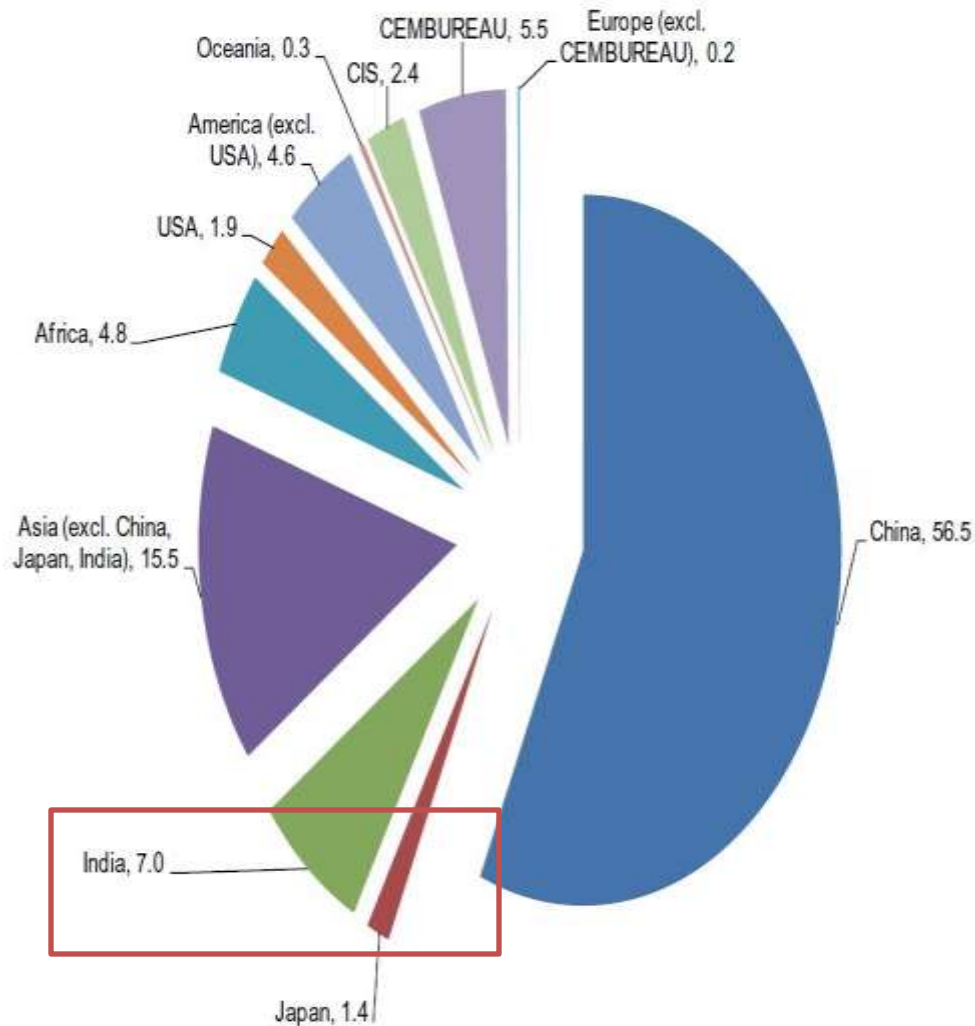
**Surendra Manjrekar, PhD, F ACI**  
**Chair**

**2<sup>nd</sup> R N Raikar Intl. Conf. and Banthia-Basheer**  
**Intl. Symposium – 2015**

**Sourabh Manjrekar**  
**Director**  
**India Chapter of ACI**

## World cement production 2014, by region and main countries, %

4.3 billion tonnes



300 million

2014

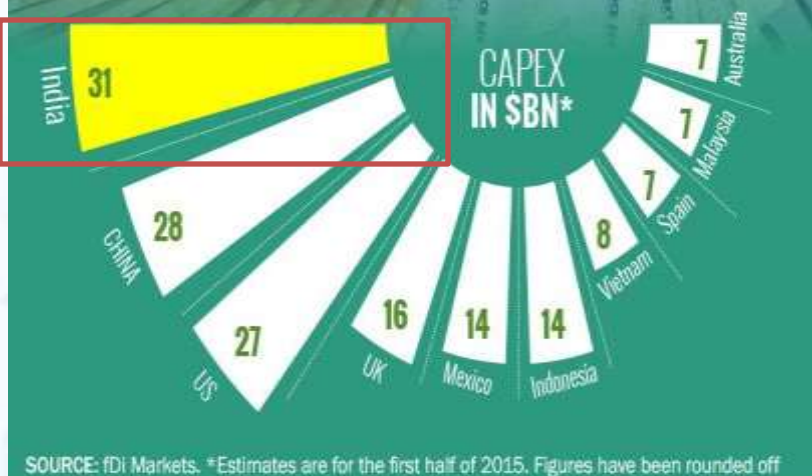
500 million

2020

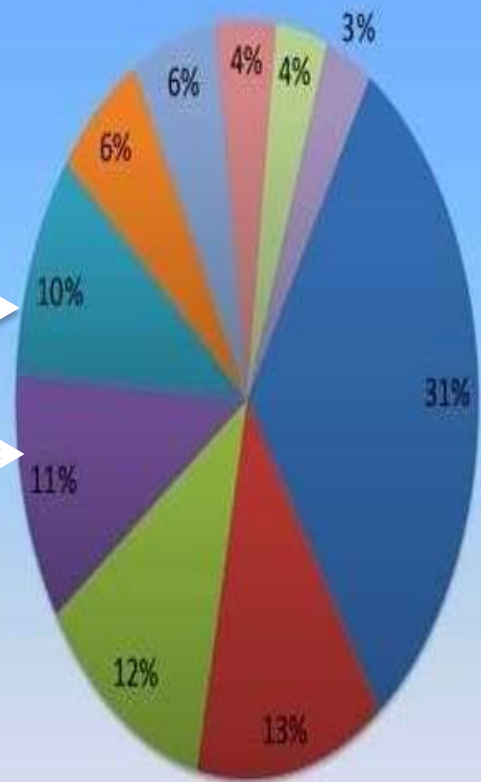
# INDIA: Top Foreign Investment Destination in the World

## DESTINATION INDIA

India beat China and the US to become the top foreign direct investment destination. Experts say China's stocks are volatile.



- Services Sector
- Computer Software & hardware
- Telecommunications
- Housing & real Estate
- Construction Activities
- Power
- Automobile Industry
- Metallurgical Industries
- Petroleum & Natural Gas



NOTE : 1) REASONABLY GOOD DISTRIBUTION.  
2) MORE FDI SAHLL BE ATTRACTED IN MANUFACTURING SECTOR



# This makes INDIA the 2<sup>nd</sup> largest emerging market for ACI

## Very Large Scope to spread the ACI message through:

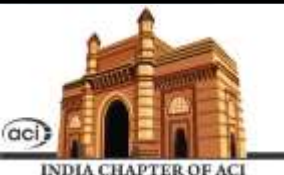
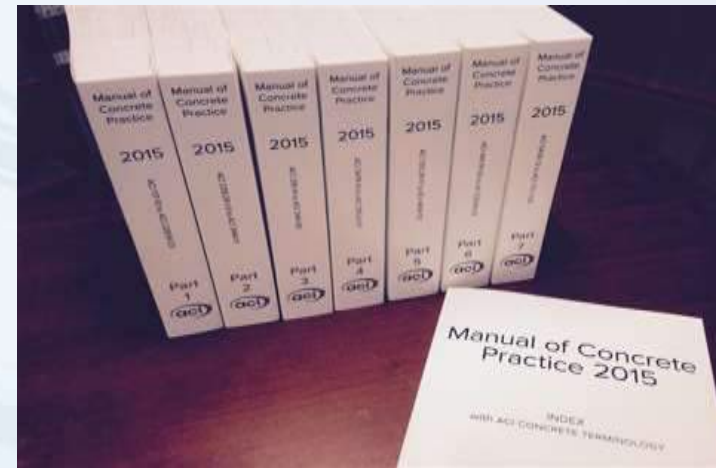


Government of INDIA



Technology Transfer  
Initiatives

**aci UNIVERSITY**





**Glimpses of**

**2<sup>nd</sup> R. N. Raikar Memorial International Conference &  
Banthia-Basheer International Symposium**

**on**

**‘Advances in Science and Technology of Concrete’**

**18<sup>th</sup> & 19<sup>th</sup> December, 2015, in Mumbai, India**



2013	2015
R. N. Raikar Memorial International Conference - "Symposium on Advances in Science and Technology in Concrete"	'2 <sup>nd</sup> R N Raikar International Conference' and 'Banthia-Basheer International Symposium' on Advances in Science and Technology of Concrete"
International Papers Recd. : 43 Nos	International Papers Recd. : 60 Nos
National Papers recd. : 22 Nos	National Papers: 50 Nos
International - Co-Sponsors : 3 Nos	International - Co-Sponsors : 10 Nos National Co-sponsors – 4 Nos
Total International Authors : 92 Nos	Total International Authors : 187 Nos
Total Participating Countries : 21 Nos	Total Participating Countries : 26 Nos



## India Chapter's 2<sup>nd</sup> R. N. Raikar Memorial International Conference, hailed by Concrete Stalwarts from 23 Nations

Representatives came from all four corners of the world such as

- |                |               |              |
|----------------|---------------|--------------|
| ✓ USA          | ✓ NETHERLANDS | ✓ BANGLADESH |
| ✓ CANADA       | ✓ TURKEY      | ✓ NEPAL      |
| ✓ MEXICO       | ✓ EUROPE      | ✓ KOREA      |
| ✓ THE AMERICAS | ✓ UAE         | ✓ SINGAPORE  |
| ✓ THE UK       | ✓ ISRAEL      | ✓ CHINA      |
| ✓ ITALY        | ✓ OMAN        | ✓ THAILAND   |
| ✓ FRANCE       | ✓ EGYPT       | ✓ AUSTRALIA  |
| ✓ SPAIN        | ✓ AFRICA      | ✓ JAPAN      |
| ✓ NORWAY       | ✓ INDIA       |              |



## The conference was co-sponsored by global institutions

American Concrete Institute, USA



The International Union of Laboratories and Experts in Construction Materials, Systems and Structures, France



Asian Concrete Federation, Thailand  
(Australia, India, Indonesia, Japan, Korea, Mongolia,  
Singapore, Taiwan, Thailand, Vietnam),



Japan Concrete Institute



Korea Concrete Institute





## The conference was co-sponsored by global institutions

The Concrete Society, UK



LEEDS University, UK



Institute of Concrete Technology, London



Instituto Mexicano del Cemento y del Concreto,  
Mexico



University of British Columbia





**Walter P. Murphy Professor of Civil Engineering(emeritus)  
Center for Advanced Cement Based Materials  
Northwestern University  
Evanston, Illinois 60208, USA**

**Dr. Surendra P. Shah**  
**Mentor** of the conference



**Prof. Nemy Banthia**  
**Canada**



**Prof. Muhammed Basheer**  
**United Kingdom**



**Mr. Pankaj Shah**  
President  
India Chapter of ACI



**Dr. S. K. Manjrekar**  
Conference Chair




**Mr. M. A. Jacob**  
Chair  
Scientific Committee



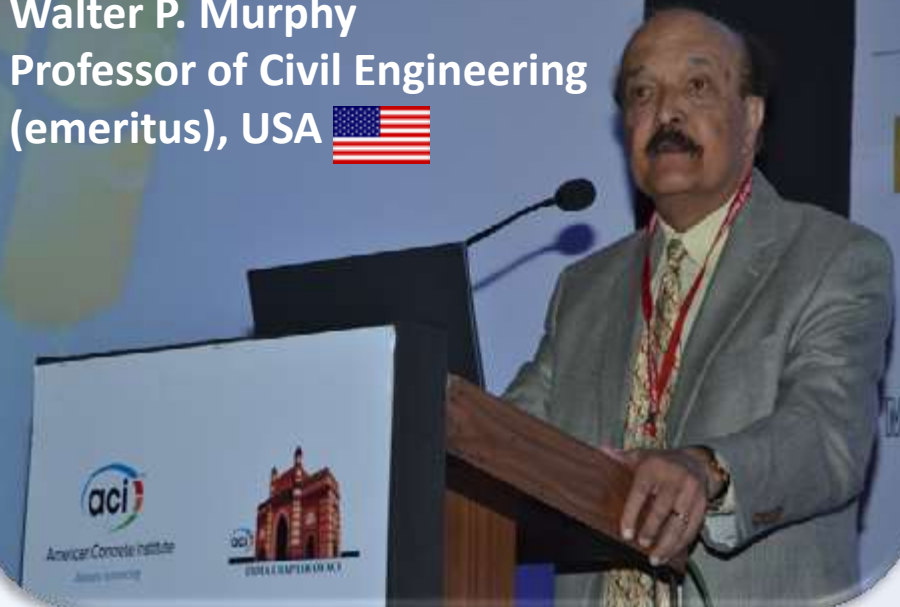
**Mr. Chetan Raikar**  
Imm. Past President



**Prof. Alejandro Durán Herrera**  
**Professor -Monterrey N.L. México**   
**Director – ACI**



**Dr. Surendra P. Shah**  
**Walter P. Murphy**  
**Professor of Civil Engineering**  
**(emeritus), USA** 



**Prof. Nemy Banthia**  
**The University of British Columbia**  
**Canada** 



**Prof. Muhammed Basheer**  
**University of Leeds**  
**United Kingdom** 






**Kyle Stanish**  
**ACI Ambassador Speaker**



**Mr. Kaushik Dutta**  
**Thornton Tomasetti**  
**Chicago** 



**Prof. Michael Grantham**  
**President**  
**The Institute of Concrete Technology**  
**UK,** 



**Prof. Shamim A. Sheikh**  
**University of Toronto**  
**Canada** 






**Prof. Daman K. Panesar**  
University of Toronto  
Canada 



**Dr. Ashok Kakade**  
Principal Engineer  
Concrete Science, USA 



**Moza Abdullah Al-Salmi**  
Sultanate of Oman 



**Prof. Prasad Rangaraju**  
Clemson University,  
USA 



**Prof. Olga Rio,**  
Scientific Researcher of  
IETcc-CSIC  
Spain 



**Dr Roger P. West**  
University of Dublin  
Ireland 



**Dr. Indubhushan Patnaikuni**  
**RMIT University**  
**Australia** 



**K.V.L. Subramaniam**  
**Professor**  
**Indian Institutes of Technology**  




**Professor Narayanan Neithalath**  
**Arizona State University USA**  




**Professor John Bolander**  
**University of California**  
**USA** 



**Dr. Rokugo Keitetsu**  
**Gifu University, Japan** 




**Manu Santhanam**  
**Indian Institutes of Technology**  





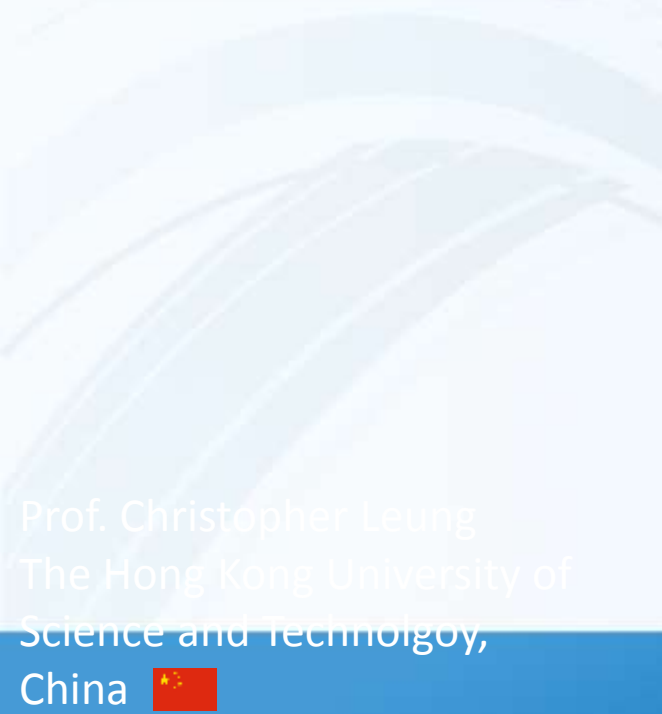

**Professor Peter Robery**  
**The University of Birmingham**  
**UK,** 



**Badan Lal Nyachhyon**  
**Past President, SCAEF**  
**Nepal** 



**Sanjay Mehta,**  
**CTO & VP Engineering,**  
**Preload Inc.,NY** 



**Prof. Christopher Leung**  
**The Hong Kong University of**  
**Science and Technolgoy,**  
**China** 



**Rishi Gupta,**  
**University of Victoria**  
**Canada** 



**Dr. Ing. Pedro Castro Borges,**  
**Mexico** 



**Dr. Ekasit Limsuwan**  
Chulalongkorn University  
Thailand 




**Dr. Cristina Zanotti**  
The University of British Columbia  
Canada 



**Dr. M. Shahria Alam**  
The University of British  
Columbia , Canada 



**Dr. Manote Sappakittipakorn**  
King Mongkut's University of  
Technology, Thailand 



**Prof. Vivek Bindiganavile**  
School of Mining & Petroleum  
Engineering, Canada 



**Professor John Hepburn**  
The University of British  
Columbia  
Vice President Research and  
International 









ARTICLE  
PUBLISHED  
IN  
CONCRETE  
INTERNATIONAL  
MARCH 2016



# The Second R.N. Raikar Memorial International Conference

Attendees from 23 countries participated in technology transfer with the India Chapter – ACI

by Surendra K. Manjrekar and Radhika Markan

**E**ngineers, scientists, professors, students, government officials, and industry leaders assembled in the Majestic Ballroom of The Lalit Hotel in Mumbai, India, for the second edition of the R.N. Raikar Memorial International Conference, on December 18-19, 2015. The India Chapter – ACI (ICACI) organized the event, and ACI was one of the cosponsors.

This event is one of many initiatives undertaken by the Chapter to promote ACI in the region, which is in line with the latter's outreach policy. ACI envisions a future where everyone has the knowledge needed to use concrete effectively to meet the demands of a changing world. In keeping with this vision, the ICACI-organized event incorporated 2 full days of technology transfer with presentations on advances in concrete technology. More than 600 participants attended, comprising concrete industry professionals from 23 nations, including the host country.

Conference attendees came from all around the world, such as Canada, Mexico, and the United States from the Americas; France, Italy, Norway, Spain, the Netherlands, the United Kingdom, and Turkey from Europe; Israel, Oman, and the United Arab Emirates from the Middle East; Egypt from Africa; Bangladesh, India, and Nepal from the Indian subcontinent; and Australia, China, Japan, Korea, Singapore, and Thailand from the Far East.

## Raikar's Legacy Honored

R.N. Raikar, after whom the conference was named, was one of the founding members of the ICACI. His sheer hard work and determination catapulted ICACI into a national body and earned it the "Excellent Chapter Award" from ACI for the last two decades. In recognition of his contributions, ACI awarded him with Honorary Membership in 2004.

During his lifetime, RNR, as he was lovingly called, consistently strived to honor persons of Indian origin making exemplary contributions to the concrete field. The first R.N. Raikar Memorial International Conference in 2013 celebrated the achievements of Surendra P. Shah, one of the world's greatest concrete technologists. This second installment of the



The overseas dignitaries and ICACI Board of Directors pose for a group photograph at the start of the R.N. Raikar Memorial International Conference





# ARTICLE PUBLISHED IN CONCRETE INTERNATIONAL MARCH 2016



ICACI President Pankaj Shah (center) and Conference Chair Surendra K. Manjrekar (right) honor Alejandro Durán-Herrera, ACI Board of Direction member (left)

conference recognized two other concrete stalwarts—Nemkumar Banthia and P.A. Muhammed Basheer—by concurrently holding the Banthia-Basheer International Symposium during the 2-day concrete event.

## Industry Support

As part of ACI's Ambassador Program, Kyle Stanish, Walker Restoration Consultants, Chicago, IL, attended the symposium and spoke on the "Evolution of Unbonded Post-Tensioned Concrete in the United States, and its Implications for Lifetime Performance and Restoration Philosophies" in the Inaugural Plenary Session.

In addition to ACI, the conference was supported by top institutions including the Institute of Concrete Technology, London; Asian Concrete Federation, Thailand; Instituto Mexicano del Cemento y del Concreto, Mexico; University of Leeds; Japan Concrete Institute; Korea Concrete Institute; International Union of Laboratories and Experts in Construction Materials, Systems and Structures (RILEM), France; Builders Association of India; Indian Concrete Institute; and Institute for Research, Development and Training of Construction Trade and Management, Bangalore.

ICACI even managed to get support from the Federation of Indian Chambers of Commerce and Industry (FICCI)—considered the voice of India's industry that reaches out to over 250,000 companies. This was a first for ICACI.

Most relevant to ACI was the support shown by various Indian government bodies, such as municipal corporations, public works departments, and housing development authorities. Participants from these various bodies showed a keen interest in the information, technical resources, and programs that ACI has to offer.

Conference Chair Surendra K. Manjrekar noted: "Indian leadership in cement and construction industry is crucial for global sustainable development. Thus the creation of this 'expressway' of knowledge transfer assumes great importance. All our international delegates are essentially 'technocrat ambassadors' of their respective countries, and together we are creating an information pool to be handed



Conference mentor Surendra P. Shah (left) congratulates conference honoree Nemkumar Banthia (right)

over to our respective government bodies and private nation builders as a ready reckoner to assist in policy making. I believe our efforts will benefit proactive government bodies and industry, and these R.N. Raikar conferences, besides being of great academic importance, will definitely impact the lives of people of India and other participating countries."

ICACI set up a separate international editorial board to evaluate technical submissions by various participating countries for inclusion in the international journals *Construction and Building Materials* (UK) and *Cement and Concrete Research* (USA).

## Positive Feedback from the Event

The conference generated tremendous interest in the ACI Concrete Field Testing Certification program and the ICACI is finalizing the most recent testing batches as a result of the national publicity.

Since the successful conclusion of the conference, ICACI has received numerous accolades. First to compliment was Alejandro Durán-Herrera, ACI Board of Direction, who stated: "I congratulate the entire ICACI team for the successful implementation of the Second R.N. Raikar Memorial International Conference. The conference had three sessions running in parallel, a testimony to the importance given by both speakers and audiences to this event. Personally for me, I was delighted to attend the conference yet again and spend time with concrete professionals and my colleagues from the India Chapter – ACI."

Joining him, Michael Grantham, President of the Institute of Concrete Technology, UK, noted: "I offer my heartfelt appreciation to the ICACI team for the seamless arrangements





# ARTICLE PUBLISHED IN CONCRETE INTERNATIONAL MARCH 2016



Conference mentor Shah (second from left) with conference honoree P.A. Muhammed Basheer (second from right). They are joined on stage by Manjrekar (left) and Banthia (right).

and the wonderful hospitality it showed me and all the international visitors to the conference. We were all overwhelmed by the welcome we received and the kindness, good humor, knowledge, and professionalism of the ICACI team. I will most certainly be returning to India for another visit and have bookmarked your next conference as a 'must visit'."

It is noteworthy to mention that the concluding plenary session was as well attended as the inaugural plenary session. A key takeaway that emerged in the concluding session was a genuine appreciation for the opportunity for representatives from like-minded concrete professional organizations and firms from all over the world to talk, network, exchange ideas, and set up paths for future collaborations, resource exchange, and knowledge sharing.

All participants thanked ICACI for giving them an opportunity to participate in a conference of such high technical content. Whether it was the design aspects of the 1 km (0.6 mile) tall Kingdom Tower in Saudi Arabia, or the complexities of the 151-story Incheon Tower in South Korea, the participants were delighted to have gained knowledge of a vast array of subjects.

Three networking dinners were organized for the participants as part of the overall program. While two were held in the conference venue, the final and concluding dinner engagement was organized at the residence of Conference Chair Manjrekar. It was a traditional Indian spread and all guests were treated to classical Indian music, traditional henna hand painting, colorful Indian stoles, and spicy Indian cuisine. Some of the international female speakers tried on the traditional Indian sari, and even managed to dance along with the peppy Bollywood music.

## Upcoming Plans

All in all, the second edition of the R.N. Raikar Memorial International Conference and the Banthia-Basheer International Symposium was a grand success. The ICACI has already started working on the third installment, scheduled for 2017.

Selected for reader interest by the editors.



Kyle Stanish speaks at the Inaugural Plenary session



An audience of over 600 technocrats attended the event



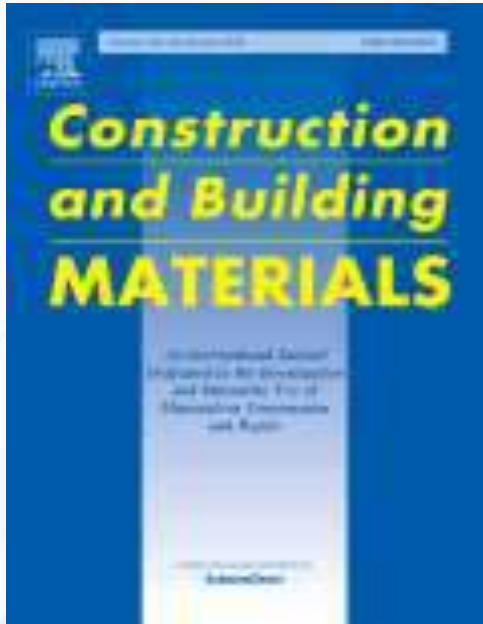
CAC Strategic Planning Task Group, and ACI Committee 364, Rehabilitation.

**Surendra K. Manjrekar**, F.ACI, is Principal of Sunanda Speciality Coatings Pvt. Ltd., Mumbai, India. A three-time Past President of the India Chapter – ACI, he served as Conference Chair for the Second R.N. Raikar Memorial International Conference. Manjrekar is a member of the International Certification Committee; Chapter Activities Committee (CAC);



**Radhika Markan** is the Managing Director, H&K Rolling Mill Engineers Pvt. Ltd. Previously, she was the Regional Manager for Emirates Airline, based at its headquarters in Dubai, UAE. Markan was recently appointed as CEO, Thermex Rebar Manufacturers' Association (TRMA), and as a Director, India Chapter – ACI.

Selected sets of conference papers will be published in reputed international journals



**CBM, (UK)**



**CCR, (USA)**



**Revista ALCONPAT  
(Mexico)**

## REACTIONS OF THE INTERNATIONAL AUTHORS



- I will most certainly be returning to India for another visit and have bookmarked your next conference as a “must visit. - Michael Grantham, President, The Institute of Concrete Technology, UK
- Congratulations to you and your team for the successful '2nd R.N.Raikar International Conference and Bantia-Basheer International Symposium'. - Prof. Surendra Shah, Walter P. Murphy Professor of Civil Engineering(emeritus), Northwestern University, USA
- I already told you that it was very well organised and it is one of the best conferences I attended. - Dr. Indubhushan Patnaikuni, School of Civil, Environmental and Chemical Engineering. RMIT University Australia







- Thank you for the successful '2nd R.N.Raikar International Conference and Banthia-Basheer International Symposium'. I enjoyed much. The city Mumbai was very attractive. - Keitetsu ROKUGO, Dean of Faculty of Engineering, Gifu University, JAPAN
- Congratulations for a very successful conference for 2 consecutive years - Dr. Ekasit Limsuwan, Chulalongkorn University, Thailand
- Congratulations to you for successful '2nd R.N.Raikar International Conference and Banthia-Basheer International Symposium' - Dr. Caijun Shi, Chair Professor , Hunan University, China
- It was, as always, a very happy experience to share time with you, your ICACI colleagues - Prof. Alejandro Durán-Herrera

Monterrey N.L. México





- The 2<sup>nd</sup> RN Raikar International Conference and Banthia-Basheer International Symposium was a tremendous experience. Your efforts toward its success are much appreciated by all. As you might know, it was my first time in India, which I thoroughly enjoyed - Prof. John Bolander, University of California, USA
- The conference was really well organized and great success owing to your contribution - Dr. Kazunori Fujikake, JAPAN
- It has provided us with immense inspiration and encouragement. It was an eye opener event for us. I am sure with your appropriate guidance; the Nepalese Concrete Industry will achieve new heights to enhance the sustainability of Concrete structures in Nepal. We will look for opportunities for working together for enhancing the Science and Technology of Concrete. - Badan Lal Nyachhyon, Nepal





**Joint International Conferences**



**Technology-Transfer to INDIA**



**Joint Inter-Chapter Programs**



**Enable you to make connections with our government policy makers**



## Maiden Batch "CHENNAI" - 2008

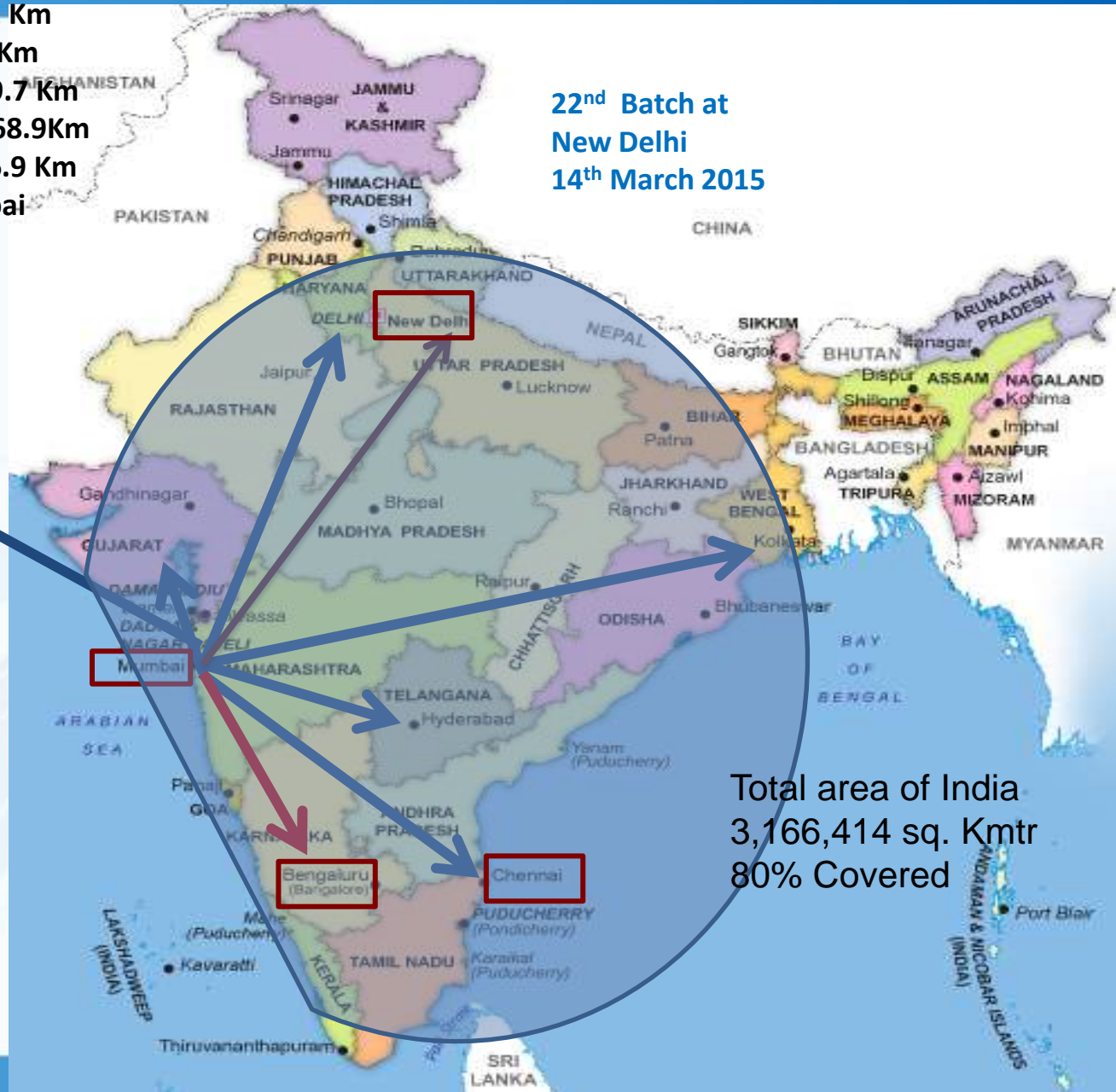
### Distance from Mumbai to

- Gujarat – 652.2 Km
- Delhi – 1424.2 Km
- Kolkatta – 1879.7 Km
- Hyderabad – 568.9Km
- Chennai – 1336.9 Km
- Gulf , UAE, Dubai

22<sup>nd</sup> Batch at  
New Delhi  
14<sup>th</sup> March 2015

Gulf, UAE

20<sup>th</sup> Batch at  
Bangalore  
28<sup>th</sup> Feb. 2014





**First certified batch at L & T Chennai**





**ACI President Dick Stehly & Ex.Vice President Ron Burg  
giving out certifications in India**



**Sitting (L to R) :** Prof V B Vanvari, Course Director, Satish C Dhupelia, President, IC-ACI, R S Chavan Executive Director, H & K Rolling Mill Engineers Pvt Ltd & Mehul Parikh Director, IC-ACI.

**Standing (L to R) :** Vishal Thombare, Asst. Course Director, Faculty : Hemendra, Dharmesh Panchal & S N Ranshur.



First ranker Ketan Magre receives certificate from R S Chavan, Executive Director, H & K Rolling Mill Engineers Pvt Ltd



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**THANK YOU**

**Surendra Manjrekar, PhD, F ACI**  
**Chair**  
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**Symposium – 2015**

**Sourabh Manjrekar**  
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