**Brief profile of the Department:**
The Department of Civil Engineering has been one of the pioneering academic departments of the National Institute of Technology, Warangal since the inception of the institute in 1959. The department offers UG program in Civil Engineering and PG programs in seven disciplines. It is one of the centers recognized by the Ministry of Human Resources Development, Government of India, for the engineering college teachers to pursue their M.Tech. and Ph.D. programs under the Quality Improvement Program, since 1978. The department is well equipped for carrying out research in upcoming areas of Civil Engineering. It has taken lead role in organizing a number of continuing education and faculty development programs for the field engineers and teachers of engineering colleges. A number of seminars and conferences have been successfully organized to provide a platform for academicians and engineers to disseminate and update their knowledge. The department offers consultancy and testing services also.

**About Warangal:**
Warangal is the second largest city of the new state of Telangana. It is situated at a distance of 140 km from the state capital Hyderabad (Nearest Airport). It is well connected by Rail (Kazipet Junction is just two km away and Warangal Station is about 12 km away to NIT Warangal) and by Road (NH 202). Warangal is renowned for its rich historical and cultural heritage. It was the seat of erstwhile Kakatiya Dynasty. It is a seat of tourist attractions with a number of historical monuments like Thousand Pillars Temple, Warangal Fort, Bhadrakali Temple, Ramappa Temple and Laknavaram Lake located in a radius of about 30 kms. Warangal City is declared by the Govt. of India as Smart City. Besides NIT Warangal, the city has Kakatiya University and Kaloji University of Health Sciences besides Kakatiya Medical College and many degree and professional colleges of higher learning along with a few autonomous Deemed Universities. The city has excellent hotels, multi-specialty healthcare and shopping complexes.

**Teaching Learning Centre of NIT Warangal:**
The Teaching Learning Centre (TLC) is established at NIT Warangal with grants from the MHRD, under the scheme, ‘Pandit Madan Mohan Malaviya National Mission on Teachers and Teaching’ (PMMMNMTT). Many senior and young faculty members across various departments of the Institute are associated with this Center as the Core-Team. One of the important objectives of the center is to conduct training programs for aspiring, newly inducted and in-service faculty in Science, Engineering and Social Sciences disciplines in higher education. Other activities of the TLC include preparation of print and e-learning materials, offering courses on-line, curriculum development, carrying out research in educational technology and pedagogy and integrating with E&ICT into teaching-learning process. A permanent multi-floor establishment with Training Halls, Studio, MOODLE and MOOCs, etc. facilities is under construction. The TLC has special programmes of training for the marginalized and women-faculty.

**Confirmation of Participation:**
On receipt of the registration form along with proof of payment of registration fee, participants will be sent confirmation of their participation through Email by 24th March 2020. The number of participants for this program is approximately 50.

**For any queries contact the Coordinators.**

<table>
<thead>
<tr>
<th>Faculty Coordinators</th>
<th>Mobile No:</th>
<th>E-mail:</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Prof. P. Rathish Kumar (CED &amp; TLC)</td>
<td>8332969250</td>
<td><a href="mailto:rateshp@nitw.ac.in">rateshp@nitw.ac.in</a></td>
</tr>
<tr>
<td>2. Prof. G. Rajesh Kumar (CED &amp; TLC)</td>
<td>9849764752</td>
<td><a href="mailto:rajesh@nitw.ac.in">rajesh@nitw.ac.in</a></td>
</tr>
<tr>
<td>3. Dr. S. Venkateswara Rao (CED)</td>
<td>8332969253</td>
<td><a href="mailto:svrao@nitw.ac.in">svrao@nitw.ac.in</a></td>
</tr>
</tbody>
</table>
Concrete is the second most used material in the world next to water and is a fundamental resource for society and economic development. Concrete has been going through tremendous dynamics to cope with the challenges posed by the construction industries each time. New technologies are being adopted to handle concrete easily, gain control and predictability to evolve a durable and environmentally friendly cost effective solution. Modern concretes, despite the popular prejudice of apparent simplicity on the contrary are truly high-tech materials. We can produce concretes for virtually any purpose. However, our ability to produce advanced concretes, with controlled rheological properties, higher compressive strength, tensile strength, high toughness and excellent long-term durability, depends on our understanding of the fundamental mechanisms governing the chemical and mechanical properties of the concrete, and our ability to manipulate the microstructure (and even sometimes the nanostructure) of the material.

Introspecting influence of construction materials on sustainability aspect, growth in need of building and infrastructure facilities, enhanced the demand for disturbance in the environment and destabilization in sustainability. The challenge before the construction sector lies in providing building materials with reduced environmental burden, improved social benefit, economical feasibility and technological sustainability.

In this connection, a Three-Day Faculty Development Program is being organized for faculty, field/practicing engineers, research scholars and PG students to get acquainted with new materials and construction technologies to incorporate cutting-edge and economically viable, sustainable solutions, thereby increasing profitability, decreasing construction time and overall impact on the built environment. Also, it helps the stakeholders of the program to brush up the rudiments and give a deeper insight into the art and science of concrete making in a lucid and systematic manner.

Topics in the Program:
- Advances in concrete making materials
- Deterioration Mechanism in concrete
- Non-Destructive Evaluation of Concrete
- Microstructure characteristics of concrete
- Special Concretes
- Energy efficient and reduction of Carbon Footprint
- Life Cycle Assessment of Materials
- Sustainable Construction and Technologies

Resource Persons:
1. Dr. S. Bhaskar,
   Senior Principal Scientist, SERC, Chennai
2. Prof. P. Rathish Kumar,
   CED & TLC, NIT Warangal
3. Prof. G. Rajesh Kumar,
   CED & TLC, NIT Warangal
4. Dr. S. Venkateswara Rao,
   CED, NIT Warangal

Registration is open to:
The program is open to all NBA and AICTE approved Engineering/Polytechnic college teachers, industry and field/practicing engineers and students. The number of participants is approximately 50 and selection will be based on priority basis. Spot registration will be permitted. DD shall be drawn in favor of Director, NIT, Warangal payable at SBI, NIT Warangal (Branch Code: 20149). The Brochure and details of the Registration Form can be downloaded from the institute website [http://www.nitw.ac.in](http://www.nitw.ac.in)

How to Apply:
Eligible candidates may apply by submitting the scanned copy of the filled in registration form (attached with this mail/ brochure) by Email to recast2020@gmail.com on or before 23rd March, 2020 along with the requisite Registration Fee.

Accommodation:
Accommodation for the outstation participants will be provided upon request in the Institute visitors Block or Students Hostels, subjected to availability and as per the institution norms on first come first served basis.

Registration Fee:

<table>
<thead>
<tr>
<th>Category of Participants</th>
<th>NIT Warangal</th>
<th>Other Institutions</th>
</tr>
</thead>
<tbody>
<tr>
<td>Faculty</td>
<td>Rs. 500</td>
<td>Rs. 1000</td>
</tr>
<tr>
<td>Students and Research Scholars</td>
<td>Rs. 200</td>
<td>Rs. 500</td>
</tr>
</tbody>
</table>

(Working Lunch will be provided for all participants on all the days of the Workshop)

Note: Registration fee for Faculty and Students of SC/ST category is half of the amounts mentioned above as applicable.

Registration fee may be sent in the form of a DD or remitted through On-line / NEFT to the Bank account given below. Scanned copy of the DD / Proof of remittance of the requisite registration fee (with transaction number if online transaction) shall be sent as attachment to the -Email.

<table>
<thead>
<tr>
<th>Account Name</th>
<th>DIRECTOR, RESEARCH ACCOUNT, NIT WARANGAL</th>
</tr>
</thead>
<tbody>
<tr>
<td>Account Number</td>
<td>62266262236</td>
</tr>
<tr>
<td>Bank</td>
<td>State Bank of India (SBI)</td>
</tr>
<tr>
<td>Branch</td>
<td>NIT Warangal Campus</td>
</tr>
<tr>
<td>Branch Code</td>
<td>20149</td>
</tr>
<tr>
<td>IFSC code</td>
<td>SBIN0020149</td>
</tr>
</tbody>
</table>
A Three-Day Faculty Development Programme on
Innovative Teaching Methods
on Recent advances in Concrete
And Sustainable Technologies (ReCAST)
Organized by the
Department of Civil Engineering
In Association with the
Teaching Learning Centre of NIT Warangal
Under the MHRD’s PMMMNMTT Scheme

REGISTRATION FORM

Name
Date of Birth
Place of Birth: Village/Town/City: District:
Tick as applicable (Rural / Urban):
State:

Aadhaar number: Gender (Put a ✓ Mark) M F

Category (Tick as applicable) : Open / OBC / SC / ST / PWD

Qualification
Designation
Organization

No. of Years of Teaching Experience:

Address for Correspondence

Mobile(s):
E-mail(s):

Accommodation: Required Not Required

Payment Details (DD): Amount: DD No.:
Date: Bank: Branch:

Declaration by the Applicant
If selected, I agree to abide by the rules and regulations of the workshop/ training programme and shall attend all the sessions.

** Kindly go through the brochure before making payment

Date: Signature of the Applicant

Recommended and Forwarded

Office Seal Signature of the Head of the Department / Institution