#### **Preamble**

At the moment, Corona virus (Covid-19) is throwing new challenges to scientific community. This global pandemic has brought Nations together to find a solution. New solutions are coming up continuously to combat the current challenges. In this situation BITDURG stands strong with the institute Motto "Aspire to Excel".

The streamed conference is the need of present situation with the cardinal point of importance of the conference aiming at exploring new horizons in Science, Technology and Management to combat current challenges through innovative research. Innovation refers to the full range of changes, large and small, used to achieve desired outcomes and innovation often results from basic research that can lead to ground-breaking discoveries and inventions. This will be essential in combating the ongoing challenges which cause hindrances to National Growth.

The proposed online conference will make an honest attempt to meet up the expectations and may become a viable option to take a way forward towards "ATMA NIRBHAR BHARAT".

#### The Institute

Bhilai Institute of Technology initiated by notable stalwarts of central India in 1986 with a vision to become one of the Premier Technical and Management Educational Institutions in the Country, delivering excellent professional education, creating value based, globally competitive professionals and achieving excellence in all our endeavors.

BIT campus has a conducive and supportive academic ambience facilitating high quality education and research for more than 4000 students of bachelors, masters and doctoral programs. BIT, Durg is the first technical institute in the state to be conferred Autonomous Status by UGC, Government of India. Seven of its undergraduate programs have been accredited by NBA and the institute itself has been "A" grade accreditation by NAAC. The institute stands in NIRF 2020 Rank-band: 251-300 in the category of Engineering. Under AICTE Margdarshan Scheme, the institute is mentoring ten technical institutions to encourage best practices.

## The Department

The Department of Applied Mathematics has been carrying out the task of imparting instructions in Mathematics courses in first & second year for B. Tech with a commendable gest. Along with these basic instructions, effort has been put in so that students are more capable in handling competitive exams. The department also teaches the subjects of Mathematics at the Post Graduate level like MBA, MCA and MTech programs of the Institute. Highly qualified and dedicated Faculties with reputation for high quality teaching is the good will of the department. The department has been recognized as a Research Center for carrying out Ph.D. Programme. R&D activities under the following topics: Fixed point theory, Celestial Mechanics, General Theory of Relativity. Fuzzy Logic & Operator Theory etc., are undertaken. The faculty members are also engaged in interdisciplinary research activities. The department has a very good number of publications in the form of research papers in International and National Journal of repute and books to its credit.

## **Conference Objective**

The scientific and technological developments over the past century have widened the range of human knowledge and capabilities to new extremities. However, still there remains an infinity of unknown in all the field of science especially mathematics. Moreover, a need for a fresh point of view is felt in present situation. These challenges have to be addressed by creating opportunities for the interaction among the highly experienced researchers and highly motivated members of the Mathematical society. There by exploring the emerging and also yet unexplored avenues of mathematics requiring solutions in both basic and applied areas.

#### **Themes and Sub Themes**

Call for papers to present and publish their innovative ideas/discoveries/ researches etc. in terms of oral presentations extremely relevant to the objective.

The contributors may be from the following Subjects:

- Functional Analysis and Applications
- Celestial Mechanics
- Queuing Theory
- Fuzzy Logic, Game theory and Algebra
- Theory of Relativity
- Fluid Mechanics
- Mathematical Modeling
- Computational Numerical Analysis
- Cryptography
- Finite Element Methods

## **BITCON 2020**

New Horizons in Science, Engineering and Management to Combat Current Challenges

## NATIONAL CONFERENCE ON

Exploring New Horizons of Mathematics in Context of Current Challenges

Conducted By **Department of Applied Mathematics** 

**20<sup>TH</sup> November 2020** 

 $\sim$	~~	 	 	
	т чин в	 - N		$\mathbf{RM}$

Name	:
Designation	:
Organization	:
Mailing Address	:
E-mail	:
Phone	:

#### **Details of Registration Fees:**

DD Drawn on: Amount (in Rs.): Demand Draft No. : Date:

Date:

Place: Signature of Applicant

The applicant is sponsored for the conference. He/She is permitted to attend the conference.

Date:

Place: Signature and Seal of Sponsoring Authority

#### **Chief Patrons**

Shri Vijay Kumar Gupta Chairman (Governing Body), BIT Trust

Shri I.P. Mishra Ex-GM, Bhilai Steel Plant & Member Secretary, BIT Trust

#### Patron

Principal, BIT, Durg. Dr. Arun Arora

#### Co-ordinator

Dr. M.V. Padmavati Dean (R&D), BIT, Durg.

## **Advisory Committee**

Vice Chancellor, CSVTU, Bhilai Dr. M. K. Verma Dr. R. P. Dubey Vice Chancellor, CVRU, Bilaspur

Dr. R. P. Vasani Director, SAL Technical Campus, Ahmedabad

Professor, YCCE Nagpur Dr. R. L Shrivastava Professor, IIT Hyderabad Dr. G. V. V. Sharma Professor, IIT, Bhilai Dr. Souradvuti Paul

Professor, Bennett University, Noida Dr. Deepak Garg

Professor, NIT, Raipur Dr. Dillip Singh Sisodia

Dr. S. K. Ganguly Dean (Quality Management), BIT, Durg

Dean (Academics), BIT, Durg Dr. Manisha Sharma

Dean (Infrastructure Development), BIT, Durg Dr. Mohan Gupta

Dean (Students Welfare), BIT, Durg Dr. Santosh Sar Dean (Administration), BIT, Durg Dr. Anup Mishra

## **Coordinating Committee**

Dr. Daljeet Singh Wadhwa Dr. Manoj Pal Dr. Surekha Bhusnur Dr. Swarnita Sharma Dr. Supriya Tripathi Dr. Prashant Sahu Dr. Arun Sahu Dr. Pawan Patnaik Dr. Sumita Nair Prof. Vikas Pandev Prof. Amit Kumar Biswas Prof. Madhumati Yadav Dr. Anindita Chakraborty

#### Convener

Dr. Sanjay Sharma

## **Organizing Secretary**

Dr. Nirmal Kumar Singh

## **Organizing Committee**

Dr. K.N. Mishra

Dr. M. D. Pandev

Dr. A. Chakraborty

Dr. A. K. Dubey

Dr. G.P. Pandev

Mrs. R. R. Dewangan

Mr. R. Patel

Mr. V. Upadhyay

### **Important Dates**

Submission of full length papers : 31st October 2020 Intimation of acceptance deadline: 07th November 2020 Receipt of registration fees : 15<sup>th</sup> November 2020

#### **Registration Fees**

Research Scholar/PG student : Rs. 500 : Rs. 800 Faculty Member Professional from Industry : Rs. 1000 UG Student : Rs. 200

1. All the payments should be made by a crossed Demand Draft in favor of "Bhilai Institute of Technology" payable at "Durg".

2. NEFT or at Bank Counter

**Beneficiary Account Number: 32471126372** 

Beneficiary Name: Bhilai Institute of Technology, Durg

Bank: State Bank of India, Sector-10, Bhilai

Address: Alka Departmental Stores, Sector-10, Bhilai (C.G.)

IFSC Code: SBIN0006942

(No TA/DA will be paid from the Institute)

## Address for Correspondence

Dr. Sanjay Sharma, Professor and Head, Dept. of Applied Mathematics, Bhilai Institute of Technology, Bhilai House, Durg. Mob: 09425246255.

Email: sanjay.sharma@gmail.com

Dr. Nirmal Kumar Singh, Professor, Dept. of Applied Mathematics, Bhilai Institute of Technology, Bhilai House,

Durg. Mob: 09425246255.

Email: nirmal1971singh@gmail.com

## **Eligibility**

Academicians, Consulting Engineers, R&D Institutes, Government Departments and Agencies, Private Companies, Research Scholars and P.G. Students.

## **Call for Papers**

Selected papers will be published in UGC indexed Journals. Prospective authors are requested to submit their full papers in MS Word format by E-mail to the addresses of correspondence. Please find the attached template for further preparation of manuscript at www.bitdurg.ac.in/bitcon2020.

## **BITCON 2020**

New Horizons in Science, Engineering and Management to Combat Current Challenges

# NATIONAL CONFERENCE

Exploring New Horizons of Mathematics in Context of Current Challenges

### 20<sup>TH</sup> November 2020



Organized By **Department of Applied Mathematics** 



BHILAI INSTITUTE OF TECHNOLOGY, DURG (Seth Balkrishan Memorial)

BHILAI HOUSE, DURG 491001 (C.G) INDIA

1<sup>st</sup> Autonomous Technical Institution in Chhattisgarh Accredited with 'A' Grade by NAAC

NIRF 2020 RANK-BAND: 251-300

Website: http://www.bitdurg.ac.in/

Phone: (0788) 2359297

Conference Website: http://www.bitdurg.ac.in/bitcon2020









