

DR. SUDHIR SHELKE

Director

Guru Nanak Institutions, Nagpur, India

Principal

Guru Nanak Institute of Technology, Nagpur, Maharashtra





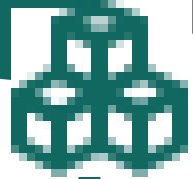
ABOUT ME

Dr. Sudhir N Shelke Working as Principal of Guru Nanak Institute of Technology, Nagpur, & Director of Guru Nanak Institution Nagpur, Ph.D. in Electronics Engineering specialising in Low Power VLSI Design Techniques. Published more than 50 research papers in various reputed National and international journals and Conferences. Author of the “Digital Image Processing” books published by S. Chand Publication, New Delhi, and “Basic of CMOS VLSI design” by Narendra Publication, An international Publishers. Books are available on Amazon. His 5 patents have been granted and 9 have been published. Several grants have been received in his name from various reputed government institutions.



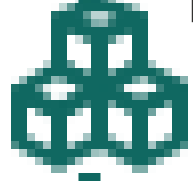


EXPERIENCE



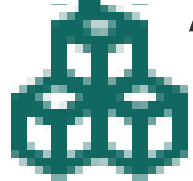
Director, Administration, 08/07/2021 - Current

Guru Nanak Institutions, Nagpur, Nagpur, India



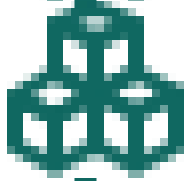
Principal (Regular –Ratified by UGC), 31/07/2019 - Current

Guru Nanak Institute of Technology, Nagpur, Maharashtra



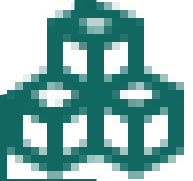
Associate Professor (Ratified by UGC), 29/06/2016 – Current

Guru Nanak Institute of Technology., Nagpur, Maharashtra



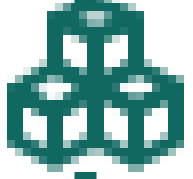
**Vice Principal & HOD ETC / Designated Associate Professor,
01/01/2014 – 24/04/2015**

Central India College of Engineering & Technology, Nagpur



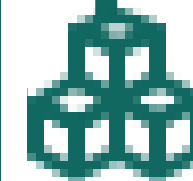
**Asst. Professor (V Pay) & Head of Department,
17/11/2008 – 11/05/2011**

Guru Nanak Institute of Technology, Nagpur, Maharashtra



Asst. Professor, 01/10/2001 – 31/05/2003

Bapuji Engineering College, Nirmal, Nagpur, Maharashtra



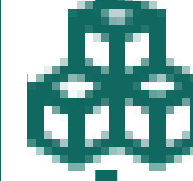
Professor, 16/05/2019 - Current

Guru Nanak Institute of Technology, Nagpur, Maharashtra



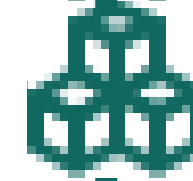
**Officiating Principal (Ratified by UGC),
29/06/2016 – 31/07/2019**

Guru Nanak Institute of Technology, Nagpur, Maharashtra



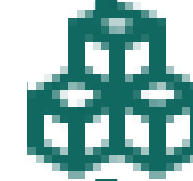
**HOD ETC /Designated Associate Professor,
25/04/2015 – 28/06/2016**

Guru Nanak Institute of Engineering & Technology, Nagpur



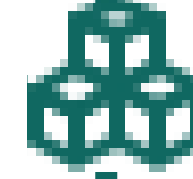
**Asst. Professor & Head of Department,
12/05/2011 – 31/12/2013**

JD College of Engineering & Management, Nagpur



**Asst. Professor (V Pay) & Head of Department, Lecturer
02/06/2003 – 15/11/2008**

Guru Nanak Engineering College, Hyderabad

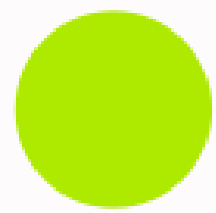


Software Engineer, 06/2000 - 09/2001

IICT VVV School, Nagpur, Maharashtra




EDUCATION



Ph.D.

- ***Doctor of Philosophy (Ph.D.):*** Low Power Design Techniques and Physical Design Challenges.
- Ramdeobaba College of Engineering & Management, Nagpur, 2016
- **University** - Rashtra Sant Tukadoji Maharaj Nagpur University. Nagpur
- ***Date of Registration:*** 10/01/2011
- Notification Detail RTMNU/Ph.D. (Cell/5/37 Dated 18 March 2016.)



- **Master of Engineering (M.E.):** Digital Electronics
- Prof. Ram Meghe Institute of Research and Tech.,
Amravati, MH, 2007
- **Percentage:** 67% First Division ●.....A circular progress indicator with a white background and a dark teal border. The inner ring is partially filled with lime green, representing 67% completion. The text '67%' is displayed in the center of the circle.
- **Year of Passing:** 2007



- ***Bachelor of Engineering (B.E.):*** Electronics Engineering
- Shri Guru Gobind Singhji College of Eng.& Tech.,
Nanded, MH, 2000
- ***Percentage:*** 66% First Division with Distinction
- ***Year of Passing:*** 2000





PORTFOLIOS



.....● Overall planning, development, renewal and changing of academic programs to ensure meaningful academic outcomes, quality, and effectiveness and obtaining the necessary approval.



.....● Positioning the faculty with regard to research and teaching.



.....● Optimizing the through-put rate of students.



.....● Plan and recruitment and training needs of academic and support staff.



.....● Establishing a sound culture of research & innovation in the faculty.



.....● Consolidate and maintain high academic quality.



.....● Ensure the facilities such as labs, library and resource centers are of high quality and well-maintained.



.....● Endorse the appointment of academic advisors, external examiners, and associate member.



.....● Nurture the intellectual, emotional, and physical development of Students.



.....● Produce high-quality and disciplined graduates of good character.



.....● Monitor and evaluate the performance and conduct of staff



.....● Foster collegial relationship and welfare among staff.



.....● Lead and plan staff development in line with objectives of university



.....● Ensuring the programs objectives are met with the allocated budget and resources available.



.....● Foster linkages with Institutions locally and nationally i.e., signed number of MoU's with different Industry.



GRANT RECEIVED

Title: Recent Trends in Web Technology-Search Engine Optimization.

Funding Agency: ISTE-AICTE

Amount in Rs:300000

Ref: ISTE /AICTE-ISTE FDP 1-3327974394/2018.

Title: 5G Technology

Funding Agency: ISTE-AICTE

Amount in Rs:93000

Ref: ISTE/AICTE-ISTE Induction-Refresher
Program/2021-22

Title: Investigation of Pallets Prepared from Different Types of Organic Municipal Solid Waste – Alternate Fuel

Funding Agency: Rashtra Sant Tukadoji Maharaj Nagpur University (Nagpur, Maharashtra, IN)

Amount in Rs: 160000

Ref: RTMNU/IIL/RGSTC/2023/652 **Date:** 3RD MAY 2023

Title: Construction of Roundabout Using Waste Tires.

Funding Agency: Ministry of Micro, Small and Medium Enterprises (New Delhi, New Delhi, IN)

Amount in Rs: 400000

Ref: File No.: 17(2)/ MSME Innovative/PMAC/2021-22 



Title: Deen Dayal Upadhyaya - Grameen Kaushalya Yojana (DDU/GKY)

Funding Agency: Department of Rural Development and Panchayat Raj-Government of Maharashtra (Navi Mumbai, Maharashtra, IN)

Amount in Rs: 34,071,940

Ref: DDU-GKY/2023-24/160

Title: Unnat Bharat Abhiyan

Funding Agency: Ministry of Education, Government of India

Amount in Rs: 50000



Title: Recent Trends in Web Technology-Search Engine Optimization.

Funding Agency: ISTE-AICTE

Amount in Rs:300000

Ref: ISTE /AICTE-ISTE FDP 1-3327974394/2018.

Title: 5G Technology

Funding Agency: ISTE-AICTE

Amount in Rs:93000

Ref: ISTE/AICTE-ISTE Induction-Refresher Program/2021-22



Title: Higher Education Incubation (HEI) Centre
Funding Agency: Ministry of Micro, Small and
Medium Enterprises (New Delhi, New Delhi, IN)
Amount in Rs: 1,00,0000
Ref: Order Sanction



**PATENTS GRATED/
PUBLISHED**

9

1. Patent Title: **ASIC-BASED POWER AND AREA EFFICIENT ROUTER IN 2- D MESH NETWORK ON CHIP.**

Publisher: THE PATENT OFFICE - GOVERNMENT OF INDIA

Date:23-07-2024

Grant Number: 202021054427-545565

2. Patent Title: **PHONE COVER BASED MOBILE CHARGERS.**

Publisher: THE PATENT OFFICE - GOVERNMENT OF INDIA

Date:22-12-2023

Grant Number: 397905-001

3. Patent Title: **ORGANIC ELECTROLUMINESCENT DISPLAY DEVICE.**

Publisher: THE PATENT OFFICE - GOVERNMENT OF INDIA

Date:04-01-2024

Grant Number: 396928-001



4. Patent Title: [SOLAR POWERED SUNSHADE CURTAIN FOR CARS](#)

Publisher: THE PATENT OFFICE - GOVERNMENT OF INDIA

Date:20/08/2022

Grant Number: 369494-001 / 125403

5. Patent Title: [DEVICE TO MONITOR THEFT BY IDENTIFYING SALIENT OBJECT](#)

Publisher: THE PATENT OFFICE - GOVERNMENT OF INDIA

Date:18/04/2022

Grant Number: 362692-001 / 115529

6. Patent Title: [Design and Fabrication of Integrated Mechanical Jack for four-wheeler.](#)

Publisher: THE PATENT OFFICE - GOVERNMENT OF INDIA

Date: 14/10/2022

Application_Number: 202221052951,

Journal No.: 41/2022.



7. Patent Title: [System and Broad-based framework for Environment audit of Industries.](#)

Publisher: THE PATENT OFFICE - GOVERNMENT OF INDIA

Date: 14/10/2022

Application_Number:202221052940,

Journal No.: 41/2022.

8. Patent Title: [Low power design Techniques for the core.](#)

Publisher: THE PATENT OFFICE - GOVERNMENT OF INDIA

Date: 16/10/2022

Application_Number:202221052955,

Journal No.: 41/2022.

9. Patent Title: [ASIC-Based Power and Area Efficient Router in 2-D Mesh Network on Chip.](#)

Publisher: THE PATENT OFFICE - GOVERNMENT OF INDIA

Date: 15/01/2021

Application_Number: 202021054427





RESEARCH SUPERVISOR/EXAMINER

7



NATIONAL/INTERNATIONAL JOURNALS & PAPERS

54



**WORKSHOP ORGANIZED AS A
CONVENER AND
SEMINAR/WORKSHOP ATTENDED**

44



PARTICIPATION ON CURRICULUM DESIGN

17



PROJECT GUIDANCE

B.E.: - 59 M.Tech.: - 15

Ph.D.: - 03

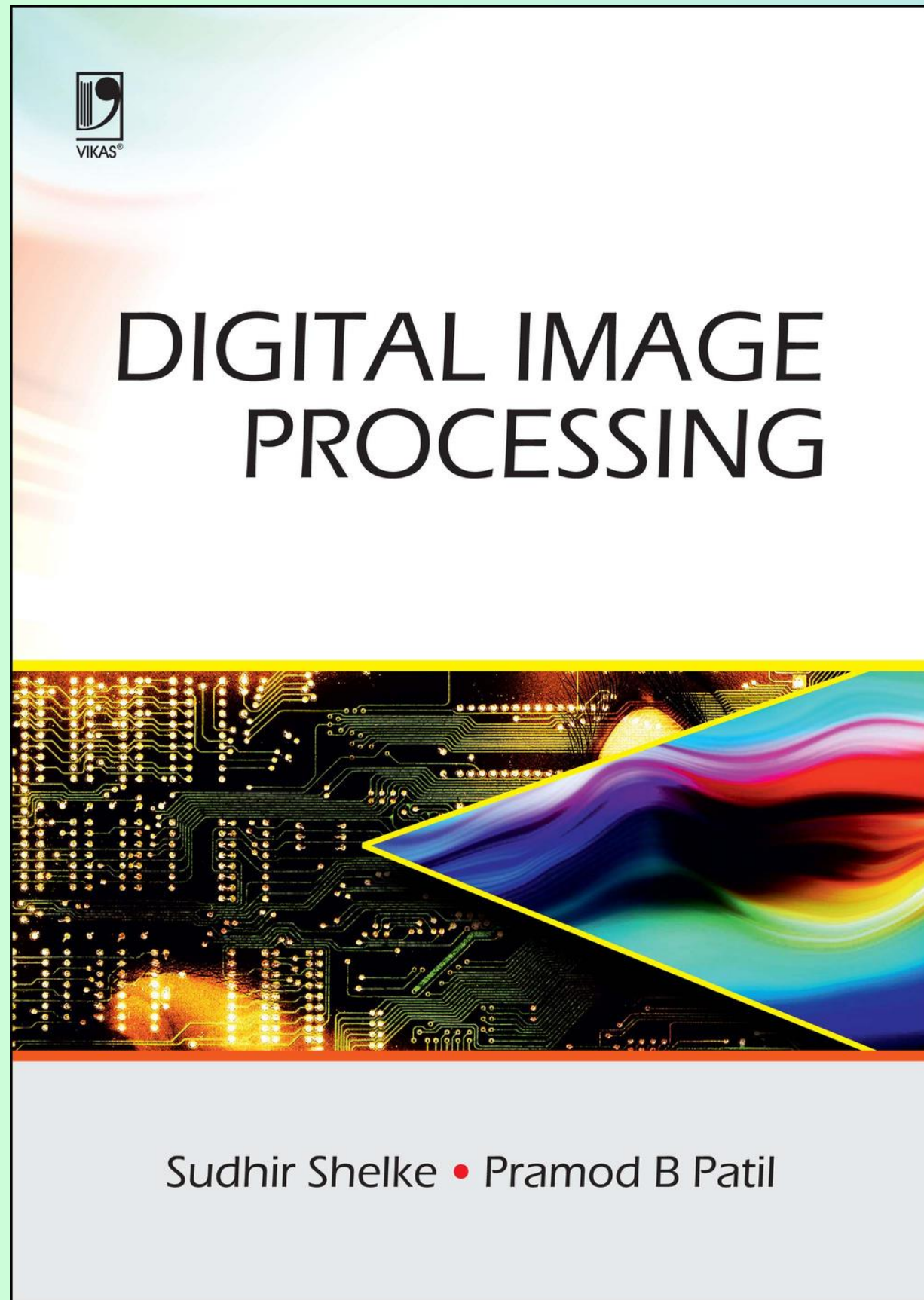


RESEARCH ARTICLE

53



BOOKS PUBLICATIONS



Digital Image Processing authored

-By-

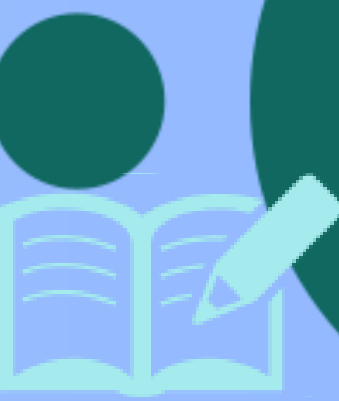
Dr. Sudhir N. Shelke

&

Dr. Pramod B. Patil

Vikas Publication House Pvt. Ltd, India.

ISBN: 978-93-25984-33



Basics of CMOS VLSI Design

-By-

Dr. Sudhir N. Shelke,

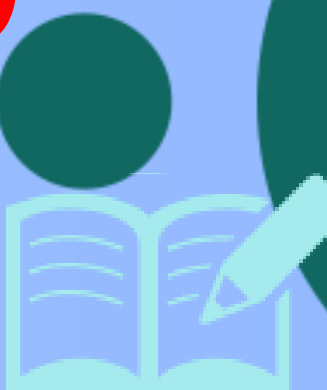
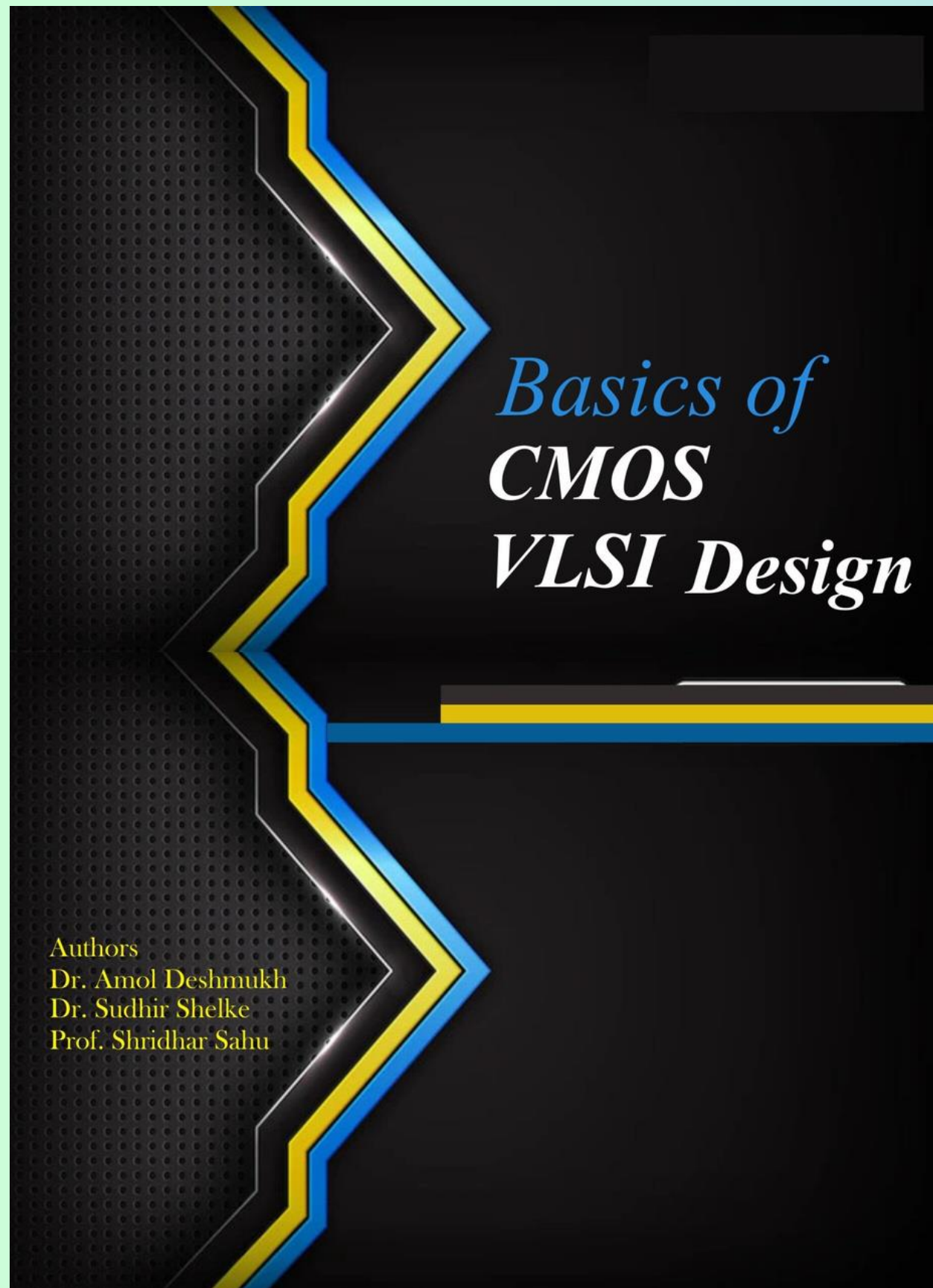
Dr. Amol Deshmukh

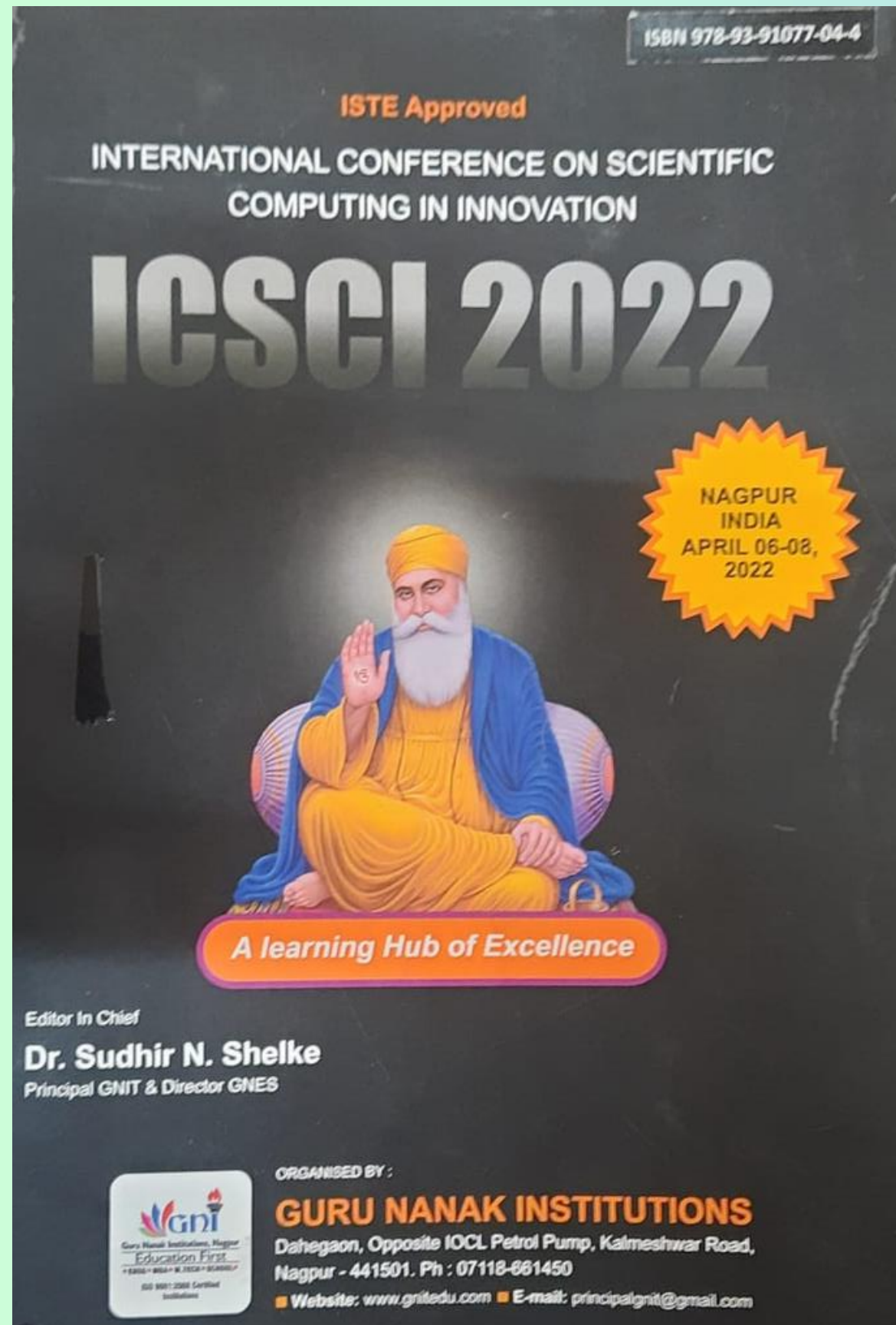
&

Prof. Sridhar sahu

Narendra Publication, Nagpur, India.

ISBN: 978-73-92572-47-0

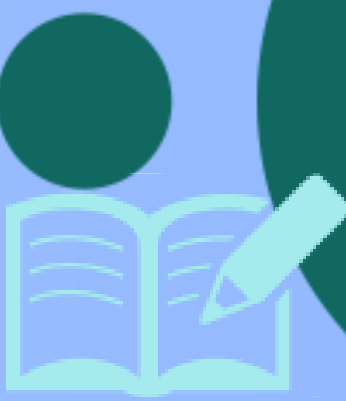




**Editor in Chief at ISTE Approved
*INTERNATIONAL CONFERENCE ON
SCIENTIFIC COMPUTING IN INNOVATION*
(ICSCI 2022).**

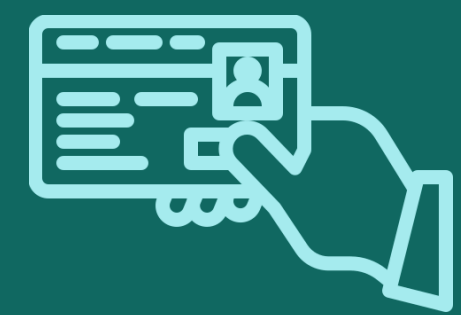
ISBN: 978- 93-91077-04-4

**Organized by Guru Nanak Institutions,
Nagpur.**





MEMBERSHIP



1. ISTE (Life Time) Membership:

LM39196

2. INSC Institute of Scholars:

InSc20200316

3. EduSkills Membership:

052006210307624

4. Fellow of The Institution of
Electronics & Telecommunication
Engineers (IETE):

F-504673



AWARDS

12

Improving university's

NAAC (National Assessment and Accreditation Council)

**Grade requires a strategic focus on
various key areas.**

Criterion 1 - Curricular Aspects

Academic Flexibility

"Percentage of new courses introduced out of total courses across all programs in the last five years."

Curriculum Enrichment

"Number of certificate, value-added, diploma, and online courses (MOOCs, SWAYAM, NPTEL, etc.) with student enrollment and benefits."

Feedback System

"Structured feedback on curriculum and its delivery is regularly obtained from stakeholders like students, teachers, employers, alumni, and academic peers."

Criterion 2 – Teaching-Learning and Evaluation

Student Enrolment and Profile

- Enrollment Percentage should be more than 90%
- Percentage of seats filled against reserved categories (SC, ST, OBC, etc.) should be 80%

Catering to Student Diversity

- Student-to-full-time teacher ratio (latest academic year data) Should be $\leq 20:1$

Teacher Profile and Quality

- Percentage of full-time teachers appointed vs. sanctioned posts in the last five years should be 90%.
- Percentage of full-time teachers with Ph.D./D.M./M.Ch./D.N.B. super specialty in the last five years.

Evaluation Process and Reforms

The number of days from the last semester/year-end exam to result in declaration, year-wise over the last five years is less than 20.

Student Performance and Learning Outcomes

Pass percentage of students (excluding backlog students) for the latest completed academic year.

Student Satisfaction Survey

Online Student Satisfaction Survey on the teaching-learning process.

Criterion 3 – Research, Innovations and Extension

Promotions of Research and Facilities

The institution provides seed money for teacher research, with a percentage of teachers receiving fellowships/support, and a percentage of PhD scholars as JRFs/SRFs over the last five years.

Resource Mobilization for Research

Research funding received by the institution and faculty from various sources over the last five years (INR in lakhs) should be ≥ 2000

Innovation Ecosystem

Number of awards for research and innovations received by the institution, teachers, research scholars, and students in the last five years.

Research Publications and Awards

The institution ensures the implementation of its Code of Ethics for research.

Consultancy

Revenue generated from consultancy and corporate training over the last five years (INR in lakhs) ≥ 200

Extension Activities

Number of extension and outreach programs conducted by the institution in the last five years.

Collaboration

Number of functional MoUs/linkages with institutions and industries in India and abroad for internships, training, project work, and exchanges in the last five years.

Criterion 4 – Infrastructure and Learning Resources

Physical Facilities

Percentage of expenditure excluding salary for infrastructure development and augmentation over the last five years (INR in lakhs) ≥ 40 .

Library as a Learning Resource

Percentage expenditure for purchasing books/e-books and subscribing to journals/e-journals over the last five years (INR in lakhs) ≥ 10 .

IT Infrastructure

The institution has e-content and resource development facilities, including an audio-visual center, lecture capturing system, central instrumentation center, animal house, museum, business lab, research database, moot court, theatre, and art gallery, categorized as A (7+), B (6), C (5), D (3-4), or E (2 or below).

Maintenance of Campus Infrastructure

Percentage expenditure on maintenance of physical and academic support facilities, excluding salary, over the last five years.

Criterion 5 - Student Support and Progression

Student Support

The percentage of students benefiting from scholarships and free-ships over the last five years should be ≥ 60

Soft skills, language and communication skills, life skills (yoga, physical fitness, health and hygiene, self-employment, and entrepreneurial skills), and awareness of trends in technology.

Student Progression

Percentage of placement of outgoing students over the last five years.

Student Participation and Activities

Number of awards/medals won by students for outstanding performance in sports and cultural activities at various levels over the last five years (≥ 80).

Alumni Engagement

Alumni contribution to the University through the registered Alumni Association over the last five years (INR in lakhs). ≥ 100

Criterion 6 – Governance, Leadership and Management

Strategy Development and Deployment

The institution implements e-governance in its operational areas.

1. Administration
2. Finance and Accounts
3. Student Admission and Support
4. Examinations

Faculty Empowerment Strategies

Percentage of teachers receiving financial support for conferences, workshops, and professional body membership fees over the last five years ≥ 60 .

Financial Management and Resource Mobilization

Funds/grants received from government and non-government bodies for infrastructure development and maintenance over the last five years (INR in lakhs) ≥ 100 .

Internal Quality Assurance System (IQAS)

Criterion 7 - Institutional Values and Best Practices

Institutional Values and Social Responsibilities

The institution has facilities for alternative energy sources and energy conservation measures.

1. Solar energy
2. Biogas plant
3. Wheeling to the Grid
4. Sensor-based energy conservation
5. Use of LED bulbs/power-efficient equipment
6. Wind or any other clean green energy

Water conservation facilities available in the Institution:

1. Rainwater harvesting
2. Borewell /Open well recharge
3. Construction of tanks and bunds
4. Wastewater recycling
5. Maintenance of water bodies and distribution system in the campus

Quality audits on environment and energy are regularly undertaken by the institution

- 1.Green audit /Environment audit
2. Energy audit
- 3.Clean and green campus initiatives
4. Beyond the campus environmental promotion and sustainability activities

The Institution has a prescribed code of conduct for students, teachers, administrators and other staff and conducts periodic programmes in this regard.

1. The institutional Code of Conduct principles are displayed on the website
2. There is a committee to monitor adherence to the institutional Code of Conduct principles
3. Institution organizes professional ethics programmes for students, teachers, administrators and other staff
4. Annual awareness programmes on Code of Conduct are organized

***The Maharashtra Public Universities Act
has undergone significant changes
between the 2016 and 2024 versions.***

Here are some key differences:



1. Governing Structure

2016: Emphasized a traditional governance model with a focus on the roles of vice-chancellors and university senates.

2024: Introduces a more decentralized governance structure, allowing for increased autonomy at the university level, including provisions for more diverse representation on governing bodies.

2. Funding and Financial Management

2016: Primarily outlined state funding mechanisms with limited scope for generating alternative revenue.

2024: Expands provisions for universities to generate funds through partnerships, research grants, and industry collaborations, promoting financial independence.

3. Regulatory Framework

2016: Established a basic regulatory framework for the functioning of universities, including accreditation norms.

2024: Introduces more stringent accreditation processes and a clearer framework for quality assurance, including the establishment of an independent accreditation body.

4. Curriculum and Academic Freedom

2016: Provided guidelines for curriculum development but with a central oversight.

2024: Grants universities greater autonomy in curriculum design and academic programs, encouraging innovation and responsiveness to local and global needs.

5. Student Representation

2016: Limited provisions for student involvement in university governance.

2024: Strengthens mechanisms for student representation in decision-making bodies, emphasizing student participation in academic and administrative processes.

6. Research and Innovation

2016: Focused on promoting research but with minimal incentives.

2024: Introduces specific initiatives and funding schemes to encourage research, innovation, and entrepreneurship within universities.

7. Teacher Recruitment and Training

2016: Standardized recruitment processes but with limited emphasis on continuous professional development.

2024: Establishes more flexible recruitment norms and emphasizes ongoing teacher training and development, including the integration of modern teaching methodologies.

8. Inclusivity and Access

2016: Addressed basic access issues but with fewer mechanisms for supporting marginalized groups.

2024: Incorporates more comprehensive policies aimed at increasing access for underrepresented groups, including scholarships and support services.

9. Dispute Resolution Mechanisms

2016: Provided basic dispute resolution guidelines.

2024: Introduces enhanced mechanisms for conflict resolution and grievance redressal, making processes more transparent and accessible.

10. Collaboration with Industry

2016: Limited emphasis on partnerships with industry.

2024: Actively encourages collaboration with industries for research, internships, and job placements, creating a more integrated approach to education and employment.





THANK YOU

For watching this presentation

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 sudhirshelke1976@gmail.com

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