



## Curriculum Vitae

- **Name:** : **Dr. Ashok Mahadu Mahajan**
- **Designation** : **Professor of Electronics & Ex-Registrar**
- **Official Address** : Kavyitree Bahinabai Chaudhari North Maharashtra University, Post Box no. 80, UmaviNagar, Jalgaon (MS) 425 001, INDIA
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  - **Web URL** : [www.ammajan.in](http://www.ammajan.in)
- **Date of Birth** : 18<sup>th</sup> December 1963.
- **Residence** : “Aawdai”, Plot No.5, Gat No.98, Nimkhedi Shivar, Near Hira Shiva Colony, Jalgaon, India.
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### ➤ Educational Qualifications:

Degree	University/Institution	Year (Award)	Title
Ph. D. (Electronics)	North Maharashtra University, Jalgaon, India.	2003	Fabrication of plasma enhanced chemical vapor deposition system and growth of thin films by PECVD (Electronics)
M.Phil. (Electronics)	Shivaji University, Kolhapur, India.	1995	Design and Investigation of Some Active R filter configuration (Electronics)
M. Sc. Physics (Electronics)	Marathwada University, Aurangabad, India.	1986	Physics (Electronics)

➤ **Technical Qualifications:**

Sr. No	Diploma/ Course	University/Institution	Year	Specialization
1	VLSI DESIGN	Jawaharlal Nehru Technological University, Hyderabad	Aug. - Sept. 2001	VLSI Design, Tools (Front End & Back end), Fabrication technology, Floor-planning, packaging etc.
2	VLSI Design & VHDL Tools training	C-DAC Center, Soft Polynomials, Nagpur	Nov. 2000	VLSI Design, Simulation & Synthesis
3	PGDCA	A. P. E. L., Hyderabad	1996	Introduction to windows, MS-Office, FoxPro programming, C/C++ Programming, SAD
4	D. A. S.	Master Chip, Nizamabad	1996	Accounting Software ( Ex )
5	C. C. O.	Shivaji University, Kolhapur	1992	Computer fundamentals, Lotus 1-2-3, dBASE- III+, Graphics

➤ **Employment History:**

Name of Employer	Post held	Period	Accountability
North Maharashtra University, JALGAON, INDIA.	Professor of Electronics	9 <sup>th</sup> Jan. 2017 to till date	To teach M.Sc. (P.G.) I & II yr. Classes, Conduct practical's, Seminars, tutorials, Guide M.Sc., M. Tech. and Ph. D. research projects and to execute the Govt. funded research projects.
	Professor of Electronics and <b>Registrar</b>	9 <sup>th</sup> Jan. 2012 to 8 <sup>th</sup> Jan. 2017	Overall administration as a <b>Chief Administrative Officer</b> of the university and Research ( executed funded research projects)
	Professor of Electronics	Jan. 2009 to Jan. 2012	To teach M.Sc. (P.G.) I & II yr. Classes, Conduct practicals, Seminars, tutorials, Guide M.Sc., M. Tech. and Ph. D. research projects and to execute the Govt. funded research projects.
	Reader (Associate Professor)	July-2003 to Dec.-2008	To teach M.Sc. (P.G.) I & II yr. Classes, Conduct practicals, Seminars, tutorials, Guide M.Sc., Ph. D. research projects and to pursue individual research
	Lecturer in Selection Grade	March-2001 to July-2003	To teach M.Sc.(P.G.) I & II yr. Classes, Conduct practicals, Seminars, tutorials, Guide M.Sc. research projects and to pursue individual research
LalBahadurShastriMahavidyalaya, Dharmabad, District: Nanded, INDIA.	Lecturer in Selection Grade	Aug-1999 to March-2001	To pursue research work at Department of Electronics, at N M U, Jalgaon (Under FIP Scheme)
	Lecturer in Senior Scale	Aug-1994 to Aug-1999	To teach M.Sc. (P.G.) I & II yr. Classes, Conduct practical's and Seminars.
	Lecturer	Aug-1986 to Aug-1994	To teach B.Sc. (U.G.) Classes, Conduct practicals and Seminars

### Academic Visits Abroad:

S. N.	Country Visited	Duration of Stay	Purpose of Visit
01	Malaysia (Penang)	26 <sup>th</sup> June to 28 <sup>th</sup> June 2018	To visit the School of Materials and Minerals Engineering, University Sains Malaysia, Penang, Malaysia to discuss the proposal of <b>ASEAN MS-INDIA</b> project with Prof. Cheong.
02	Taiwan (Taipei)	22 <sup>nd</sup> May to 1 <sup>st</sup> June 2018	To visit the research laboratories and to deliver lectures series in the Department of Materials Science and Engineering, NTUST, Taipei, Taiwan as a ' <b>Visiting Professor</b> '.
03	WrUST, Wraclaw, Poland	24 <sup>th</sup> – 26 <sup>th</sup> January 2018	WP3 meeting of Erasmus+ funded consortium project CABGIN at WrUST, Wraclaw, Poland
04	Taiwan (Hsinchu)	20 <sup>th</sup> Oct-2017	To visit the research laboratories and to deliver an invited talk on “High-k/low-k thin films based MOS devices for advanced CMOS technology” at Department of Materials Science and Engineering, NCTU, Hsinchu, Taiwan.
05	Taiwan (Taipei)	19 <sup>th</sup> Oct-2017	To visit the research laboratories and give the presentation/introduction about the facilities and School of Physical Sciences, NMU and signing of MoU, with Department of Material Science Engineering, at National Taiwan University of Science and Technology (NTUST, Taiwan Tech), Taipei, Taiwan.
06	China (Beijing)	17 <sup>th</sup> Oct-2017	To deliver a talk entitled “Dielectric thin films based MOS devices for advanced CMOS technology” and to visit Applied Physics department, China Agricultural University, Beijing, China.
07	China (Beijing)	15 <sup>th</sup> Oct. -17 <sup>th</sup> Oct. 2017	To deliver an invited talk in 2 <sup>nd</sup> International Workshop “Materials for Advanced Interconnects and Packaging MAIP-2017)” at North China University of Technology (NCUT), Beijing, China.
08	Cyprus	6 <sup>th</sup> to 7 <sup>th</sup> July 2017	To participate in 2 <sup>nd</sup> meeting of Erasmus+ funded consortium project CABGIN at Frederick University, <b>Cyprus</b>
09	China (Beijing)	29 <sup>th</sup> Oct. -2 <sup>nd</sup> Nov. 2016	To participate in official meeting to discuss the BRICS multilateral tri-country research project of <b>China</b> , Russia and India and to deliver an invited talk in the workshop on “Materials or Advanced Interconnects”
10	Germany (Berlin, Frankfurt Oder)	21 <sup>st</sup> – 24 <sup>th</sup> Sept. 2015	To visit Helmholtz Zentrum, Berlin and IHP Microelectronics, Frankfurt Oder, <b>Germany</b>
11	Poland (Wroclaw)	21 <sup>st</sup> Sept. 2015	To visit Wroclaw University of Technology, Wroclaw to initiate the futuristic collaborations between NMU and WUT, <b>Poland</b> .
12	Poland (Warsaw)	15 <sup>th</sup> – 18 <sup>th</sup> Sept. 2015	To Participate in International Conference E-MRS 2015 and to visit Warsaw University of Technology, Warsaw to initiate the futuristic collaborations between NMU and WUT, <b>Poland</b> .
13	Netherland (Amsterdam)	14 <sup>th</sup> Sept. 2015	To visit University of Amsterdam, Netherland to initiate the futuristic collaborations between NMU and UA, <b>Netherland</b> .
14	Japan (Tokushima)	19 <sup>th</sup> -20 <sup>th</sup> March 2015	To deliver invited talk in International Symposium at Tokushima University, Tokushima, <b>Japan</b> .

15	USA (Riverside, Santa Barbara, Los Angeles, New York)	3 <sup>rd</sup> -9 <sup>th</sup> June 2014	To visit UCSB Nano lab laboratory to carry out some device fabrication work and to sign MoU between NMU and University of California, Riverside (UCR), <b>USA</b> .
16	Mexico	30 <sup>th</sup> May-2 <sup>nd</sup> June 2014	To visit CETYS University and to deliver invited talk at CETYS University, Ensenada Campus, <b>Mexico</b> .
17	Bangkok (Thailand)	30 <sup>th</sup> Nov.-2 <sup>nd</sup> Dec. 2013	To participate in International Conference on Energy, Environment and Sustainable Economy (ESEE 2013) at Bangkok, <b>Thailand</b> .
18	Japan (Tokushima)	3 <sup>rd</sup> -5 <sup>th</sup> March 2013	To deliver invited talk and to visit Tokushima University, Tokushima, <b>Japan</b> .
19	Germany (Dresden)	8 <sup>th</sup> -9 <sup>th</sup> July 2011	To visit Fraunhofer Center Nanoelectronic Technologies (CNT) at Dresden, <b>Germany</b> .
20	Czech Republic (Prague)	3 <sup>rd</sup> -8 <sup>th</sup> July 2011	To Participate in an International Conference, ICFSI-2011 at Institute of Physics of the Academy of Sciences of the Czech Republic, Prague, <b>Czech Republic</b> .
21	Maldives (Male)	25 <sup>th</sup> -30 <sup>th</sup> May 2011	To Participate in an International IEEE Conference, EESP-2011, <b>Maldives</b> .
22	USA (San Francisco, Santa Barbara, Los Angeles, New York)	5 <sup>th</sup> -19 <sup>th</sup> April 2010	To participate in International Conference MRS 2010 and to visit UCSB NNIN Nano lab to carry out some device fabrication work, <b>USA</b> .
23	JAPAN (Tokyo, Nagoya, Tokushima)	1 <sup>st</sup> -8 <sup>th</sup> Nov. 2008	To participate in International Workshop IWDTF-08 at Tokyo, to visit Tokushima University, Tokushima and The Nagoya University, Nagoya, <b>Japan</b> .
24	Italy (Milan, Trieste, Cosenza & Roma)	29 <sup>th</sup> Nov.-11 <sup>th</sup> Dec. 2006	To visit the advanced research laboratories like MDM, INFN and Licryletc, <b>Italy</b> .
25	France (PARIS)	25 <sup>th</sup> -28 <sup>th</sup> Nov. 2006	To visit the Laboratory at University Pierre and Marie curie, department of Microelectronics, <b>France</b> .
26	Algeria	18 <sup>th</sup> -24 <sup>th</sup> Nov. 2006	To Participate in International Conference, ICMNT-06, <b>Algeria</b> .
27	Seoul & Daejeon, South Korea	27 <sup>th</sup> -30 <sup>th</sup> April 2004	To deliver invited talks at KIST Seoul & KAIST, Daejeon, <b>South Korea</b> .
28	California, USA	18 <sup>th</sup> -25 <sup>th</sup> April 2004	To present paper in International Conference ICMCTF-04 at SAN DIEGO, <b>USA</b> .
29	California, USA	25 <sup>th</sup> April-5 <sup>th</sup> May 2003	To present paper in International Conference ICMCTF-03 at SAN DIEGO, <b>USA</b> .

➤ **Working Experience :Total 32 years (Teaching, Research and Educational Administration )**

➤ **Teaching:**

- VLSI Design techniques
- Principles of CMOS VLSI design
- CMOS processing technology
- VLSI design methods for ASICs
- Device Fabrication Techniques (DFT)
- VLSI Design tools (front-end & back-end)
- Optoelectronics
- Mathematical Methods for Electronics (MME)
- Digital Electronics
- Analog circuit design techniques
- Digital circuit design and Digital Signal Processing (DSP)
- Automatic process control systems
- Industrial Automation and Control System
- Micro-Electro-Mechanical System (MEMS)

- Advance Communication System (ACS)
- High-k/low-k thin films based MOS devices for advanced CMOS technology

➤ **Research Area:**

- Deposition of high-k dielectric thin films (by PEALD, RF-Sputtering), fabrication of novel High-k / Metal Gate stacks on Si, Ge & compound semiconductors, MOS capacitors and characterization for advanced CMOS technology (FEOL).
- Deposition of low dielectric thin films, Aerogel, Xerogel, Surfactant and Porogen based low-k thin films on Si substrates and characterization, MIS structures for ULSI technology (BEOL).
- Investigation of novel rare earth oxide materials for nano devices for future ULSI technology.
- Polymer based gas sensors.

➤ **Research Projects:**

a) **International Consortium Projects: CABCIN**

Sr. No.	Title of Project	Project Expenditure	Granting Agency	Date of start	Date of Completion
<b>Ongoing</b>					
01	<b>Establishment of Capacity Building Centers as a Sustainable Solution to Raise the Standards of Teaching Staff in Indian HEI's CABCIN</b> <i>Participation: One University from each of the following EU countries- Poland, Portugal, Belgium, Slovakia, Cyprus and 5 Indian Universities including NMU, Jalgaon.</i>	(947,741,66 EUR) NMU(68,210 Euro)	ERASMUS +	15 <sup>th</sup> Oct 2016	14 <sup>th</sup> Oct 2019
NMU Co-ordinator/PI: Prof. A. M. Mahajan					

b) **Major Research Projects: (Completed: 06 and Ongoing: 01 as Principal Investigator)**

Sr. No.	Title of Project	Project Grant (Rs. In Lacs)	Granting Agency	Date of start	Date of Completion
<b>Ongoing</b>					
1	Investigation of high-k dielectrics ultra-thin films on compound semiconductor by ALD for alternative gate stack devices	12.50	CSIR, New Delhi	June 2016	May 2019
<b>Completed</b>					
2	Deposition and electrical characterization of rare earth oxide doped high-k films on Si substrates for nanoscale MOSFETs	10.98	UGC, New Delhi	July. 2015	June 2018

3	An innovative interfacial control layer on Ge channel substrate for the effective fabrication and integration of novel “Ge/ALD High-k/capping layer/ Metal (bilayer) Gate stacks” for future Nano electronics applications.	50.66	Nano-mission, DST, New Delhi	Nov 2012	April 2016
4	Deposition and characterization of silica aerogel low-k thin films as interlayer dielectric (ILD) in ULSI circuits	22.34	SERB, DST, New Delhi	Oct 2012	Sep 2015
5	Surface modification and Electrical characterization of Low-k thin film for dielectric application in Nanoelectronics	15.5	CSIR, New Delhi	May 2009	April 2012
6	Investigation, fabrication and characterization of different MIS structures for ULSI technology	12.24	UGC, New Delhi	May 2009	Oct. 2011
7	Characterization of Dielectric films deposited by PECVD system	10.67		Jan. 2005	Dec. 2007
<b>Total amount receivedRs. 134.89 Lacs. (Rupees one crore thirty four lacs eighty nine thousands only)</b>					

**c) Collaborative Research Projects:**

**(Completed: 06 and Ongoing: 02 as Principal Investigator)**

Sr. No.	Title of Project	Grant	Granting Agency	Date of start	Date of Completion
<b>Ongoing</b>					
01	Fabrication and Characterization of metal/ high-k/passivated compound semiconductor gate stacks	INUP collaborative	<b>CEN, IITB</b>	<b>May-2018</b>	<b>On going</b>
<b>Completed</b>					
02	Fabrication and characterization of High-k Dielectric thin films based MOS structures deposited by indigenously developed PEALD	** INUP Collaborative	CEN, IITB Mumbai	Jan 2017	June 2017
03	Fabrication and characterization of silica aerogel low-k based MIS structures			Feb. 2016	<b>June-2016</b>
04	Characterization of Ge/SiC high-k deposited thin films for advanced CMOS technology			2015	2015
05	Fabrication and characterization of Ge/ Oxide/Metal gate stacks			2014	2014
06	Fabrication and characterization of novel metal gate High-k based MOS capacitors for future ULSI technology			2009	2011
07	Fabrication and characterization of novel “Ge/high-k/capping layer/ Metal (bilayer) Gate stacks” for advanced CMOS technology.			2012	2013

08	Characterization of surface modified low-k thin films for ILD applications in Nanoelectronics			2012	
09	Investigation of radiation effect on low dielectric thin films for CMOS/VLSI technology	*IUAC Collaborative	IUAC, New Delhi	2010	2012
10	Study of radiation effect on dielectric thin films for CMOS/ULSI technology	*IUAC Collaborative		Mar. 2015	<b>June-2017</b>

\***IUAC Collaborative:** Ion irradiation and characterization facilities along with TA/DA, accommodation of PI and research students.

\*\***INUP Collaborative:** Fabrication and characterization facilities along with recurring expenses, TA/DA, accommodation of PI and research students.

**d) International Research Projects: (Submitted to various funding agencies)**

S. No.	Title of Project	Granting Agency
<b>Submitted</b>		
01	<b>Ultra-low-k materials for advanced nanoelectronics</b>	DST, New Delhi <b>(BRICS)</b>

Note: Based on *Prof. Mahajan's* overall contribution towards **BEOL technology**, he is invited by the Russian and Chinese leading research groups to participate in their **Multi-Country nanoelectronics proposal under BRICS** as the only Indian research collaborator/partner.

**e) Departmental Projects:**

**(Ongoing: 1 as Deputy Co-ordinator)**

Sr. No.	Title of Project	Project Expenditure (Rs. In Lacs)	Granting Agency	Date of start	Date of Completion
<b>Ongoing</b>					
01	UGC SAP-DRS-III School of Physical Sciences, North Maharashtra University, Jalgaon.	51.50	UGC, New Delhi	Apr. 2016	March 2021
<b>Total amount received</b>		<b>Rs. 51.50 Lacs (Rupees fifty one lacs fifty thousand only)</b>			

**f) Institutional Projects:**

**(Ongoing: Rashtriya Uchcharitar Shiksha Abhiyan (RUSA) Co-ordinator at NMU up to Jan-2017)**

Sr. No.	Title of Project	Project Expenditure (Rs. In Lacs)	Granting Agency	Date of start	Date of Completion
01	RUSA Grant	2000.00	MHRD, New Delhi	Apr. 2015	<b>Jan-2017</b>
<b>Total amount received</b>		<b>Rs. 2000.00 Lacs (Rupees twenty crores only)</b>			

**g) Institutional Projects:**

**(Submitted: DST, FIST for SOPS (as a PI) Proposal Prepared as per the direction of Director and Hon'ble VC)**

Sr. No.	Title of Project	Project Expenditure (Rs. In crore)	Granting Agency	Date of start	Date of Completion
<b>Ongoing</b>					
01	FIST-Project (Level-2)	<b>Rs. 7.5 crore</b>	DST, New Delhi	<b>Submitted (June-2018)</b>	-----

➤ **International Research Collaborations:**

1. Prof. Ir. Dr. Cheong Kuan Yew, School of MMRE, University Sains Malaysia, **Malaysia.**
2. Prof. Terence K.S. Wong, School of EEE, Nanyang Technological University, **Singapore**
3. Prof. Mikhail Baklanov, North China University of Technology, Beijing, **China.**
4. Prof. Yee-Wen Yen, National Taiwan University of Science & Technology, Taipei, **Taiwan.**
5. Prof. Ri-ichi Murakami, National Taiwan University of Science & Technology, Taipei, **Taiwan.**
6. Prof. Dr. Thomas Schroeder, IHP Microelectronics, Frankfurt, **Germany.**
7. Dr. Pankaj Koinkar, Graduate School of Science and Technology, Tokushima University, **Japan.**
8. Prof. Jin-Ping Ao, Graduate School of Science and Technology, Tokushima University, **Japan.**
9. Prof. Brian J. Thibeault, ECE Department, University of California, Santa Barbara, CA, **USA(2010 - 2015)**
10. Prof. Nakatsuka, Graduate School of Engineering, Nagoya University, Nagoya, **Japan(2009-2013).**

➤ **National Collaborations:**

1. CEN (Center Of Excellence in Nanoelectronics), IIT Bombay, Powai, Mumbai under Indian Nanoelectronics User Programme (**INUP**).
2. Dr. K. Asokan, Inter University Accelerator Center (**IUAC**), New Delhi.
3. Prof. M. A. More, Savitribai Phule Pune University, Pune.
4. Prof. M. D. Shirsath, Dr. BAMU, Aurangabad.

➤ **Scientific Contribution :**

As an outcome of exposure/expertise gained through various research project execution and visits abroad the '*Materials and Devices Laboratory for Nanoelectronics*' (**MDLN**) has been established at **NMU, Jalgaon.**

I have developed well equipped MDLN lab through seven (6 completed and 1 ongoing) major research projects worth **Rs. 1.35 Crore** funded by different funding agencies i.e. **University Grants Commission, Council for Scientific and Industrial Research, SERB, DST, Nano- Mission DST** etc. Our major research area includes low-k, high-k thin film growth and characterization, fabrication of MIS structures, Novel high-k / Metal Gate stacks MOS capacitors for advanced CMOS technology for future nano-electronics. Up till now **185** research papers have been published/presented by our research team in National/International journals/Conferences of high repute. I have applied for one patent on indigenously developed **Plasma Enhanced Atomic Layer Deposition (PEALD)** system. Under the guidance of Prof. Mahajan **5** students completed/awarded **Ph. D.** degree, **2** students submitted Ph.D. thesis, **2** students awarded **M. Phil** degree and **4** students are currently working for their **Ph.D.** degree. **MDLN have following sophisticated deposition and characterization facilities are available:**

- Indigenously developed Plasma Enhanced Atomic Layer Deposition (**PEALD**) system. through Nano mission funded project
- E-beam Evaporator (Milman, India) through UGC funded , Project
- Rapid Thermal Processing (**RTP**) Unit through UGC funded , Project
- Super Critical Drying Setup (Amar Equipment Ltd. India) through SERB, DST funded project
- FTIR Spectrometer (Model Nicolet 380) through CSIR funded project
- Spin Coater (Milman, India) CSIR funded project
- Viscometer (Brookfield, USA) Departmental funds
- Chemical Treatment Bench , DST project
- Reflux set up with water distillation plant.



➤ No. of Students supervised for Ph.D. / M. Phil.:

Ph. D. Degree awarded : 05 working : 06

Sr. No	Name of Ph. D. Student	Ph. D. Thesis Title	Year Registration	Year Award
01	<b>Dr. Bhavana N. Joshi</b>	Growth and characterization of Low-k Dielectric Thin Films for VLSI Applications	2006	2010
02	<b>Dr. Yogesh S. Mhaisagar</b>	Surface modification and electrical characterization of porous low-k thin film for nanoelectronics applications	2009	2014
03	<b>Dr. Anil G. Khairnar</b>	Deposition and characterization of High-k Dielectric Thin Films for MOS capacitors	2011	2015
04	<b>Dr. Ravindrakumar G. Bavane</b>	Synthesis and characterization of thin films of conducting polymer for gas sensing applications	2007	2015
05	<b>Dr. Anil S. Gaikwad</b>	Synthesis and characterization of silica aerogel thin films as Inter Layer Dielectrics (ILD) in ULSI circuits.	2013	2017
06	<b>Mr. Vilas S. Patil</b>	Structural and electrical characterization of Atomic Layer Deposition (ALD) System deposited High-k films based MOS devices for advanced CMOS technology.	2013	Thesis submitted
07	<b>Ms. Khushabu S. Agrawal</b>	Deposition of rare earth oxides by ALD and its applications for alternative gate stack devices.	2013	Draft Thesis submitted
08	<b>Ms. Viral N. Barhate</b>	Deposition of high-k dielectrics ultra-thin films by using PEALD on compound semiconductors.	2015	On going
09	<b>Mr. Sumit R. Patil</b>	Investigation of novel high-k nanolaminates for MIM capacitors.	2017	On going
10	<b>Ms. Swati A. Gupta</b>	Porogen based porous low-k films for ILD applications	2018	On going
11	<b>Ms. Deepashri Torawane</b>	Registration in process	2018	

• M.Phil. Degree awarded : 02

Sr. No.	Name of M. Phil. Student	Thesis Title	Year of Degree Awarded
01	Mr. Anil Patil	Growth and characterization of High k Gate dielectric thin films	2009
02	Mr. Abhay Shrivastava	Synthesis and characterization of Conducting Polymer For Electronics Applications	2009

Students Guided (M. Sc. /M. Tech. Projects) : 60+  
M. Sc. : 50+  
M. Tech. : 10+

➤ **Patent :**

No.	Title	Inventors	Year
01	Plasma enhanced atomic layer deposition system and method of use	Ashok M. Mahajan, Vilas S. Patil and Lalit S. Patil	Feb. 2016 (Patent under examination, <b>Patent No. 201621006604</b> )

➤ **Memberships and Research IDs:**

- Semiconductor Society of India (Life Member).
- IEEE ED Society.
- **Scopus Author ID:** 55185022300
- **ResearcherID:** A-4812-2016
- **Orcid ID:** 0000-0003-4212-299X
- <https://scholar.google.co.in/citations?user=qU9g8hYAAAAJ&hl=en>

➤ **Research Publications:**

- **Citation Indices (From Google Scholar updated on April 2018)**

	All	Since 2013
<b>Citations</b>	352	269
<b>h- Index</b>	10	08
<b>i10- Index</b>	10	08

Published / submitted / accepted / presented in journals / conferences : **184**

- **Journals** : **58**

International : Published - 51, In Review-03  
National : Published -04

- **Conferences** : **126**

International: Attended/presented papers/ published in proceedings : **68**  
National: Attended/presented papers/published in proceedings : **58**

- **Book chapters** : **03**

**Journal Publications (National/International)**

1. Anil S. Gaikwad, Yogesh S. Mhaisagar, Swati A. Gupta, Bhavana N. Joshi, Kandasami Asokan and **Ashok M. Mahajan**, "Amorphisation of SiO<sub>2</sub> thin films by using 200MeV Ag<sup>15+</sup> ions" Accepted to Silicon (Springer), doi.org/10.1007/s12633-018-9882-4 (2018) **SCI-IF- 1.246**.
2. Viral Barhate, Khushabu Agrawal, Vilas Patil, Sumit Patil and **Ashok Mahajan** "Spectroscopic study of La<sub>2</sub>O<sub>3</sub> thin films deposited by indigenously developed plasma-enhanced atomic layer deposition system" to International Journal of Modern Physics B Vol. 32, No. 19 (2018), **SCI-IF-0.769**.
3. Khushabu S. Agrawal, Vilas S. Patil, and **Ashok M. Mahajan** "Atomic Layer Deposited HfO<sub>2</sub> Ultra-thin Films on Different Crystallographic Orientation Ge for CMOS Applications" to Thin Solid Film 654, 30-37(2018) **SCI-IF-1.939**.
4. Khushabu S. Agrawal, Vilas S. Patil, Anil G. Khairnar, and **Ashok M. Mahajan** "Preparation of rare earth CeO<sub>2</sub> thin films using metal organicdecomposition method for

- metal-oxide–semiconductor capacitors” *Journal Materials Science: Materials in Electronics* 28, 12503–12508 (May 2017) **SCI-IF-2.019**.
5. Swati A. Gupta, Anil S. Gaikwad and **Ashok M. Mahajan** “Tween-80 based ultra-low-k (ULK) mesoporous films” *Journal of Materials Science: Materials in Electronics* 28, 14763–14768 (June 2017). **SCI-IF- 2.019**
  6. Vilas S. Patil, Khushabu S. Agrawal, Anil G. Khairnar, Brian J. Thibeault and **Ashok M. Mahajan** “Interfacial and electrical properties of Al<sub>2</sub>O<sub>3</sub>/HfO<sub>2</sub> bilayer deposited by atomic layer deposition on GeON passivated germanium surface” *Materials Research Bulletin* 87, 208–213 (2017). **SCI-IF- 2.873**
  7. Anil G. Khairnar, Vilas S. Patil, Khushabu S. Agrawal, Rahul S. Salunke and **Ashok M. Mahajan**, ‘PEALD growth high-k ZrO<sub>2</sub> thin films on SiC compound semiconductor’ *Semiconductor (Springer)* 51 (1), 131-133 (2017), **SCI-IF-0.602**.
  8. Namrata B. Pawar , Yogesh S. Mhaisagar , Anil S. Gaikwad and **Ashok M. Mahajan** “Influence of solvent variation on Tween-80 porogen based low-k thin films” *Silicon (Springer)* 9(3), 439-446 (2017) **SCI-IF–1.246**.
  9. Vilas S. Patil, Khushabu S. Agrawal, Anil G. Khairnar, Brian J. Thibeault and **Ashok M. Mahajan** “Structural and Electrical Properties of Ultra-Thin High-k ZrO<sub>2</sub> Film on Nitride Passivated Ge (100) Prepared by PEALD” *Materials Science in Semiconductor Processing (Elsevier)* 56 277-281 (2016) **SCI-IF-2.593**.
  10. Khushabu S. Agrawal, Vilas S. Patil, Anil G. Khairnar and **Ashok M. Mahajan** “HfO<sub>2</sub> gate dielectric on Ge(111) with ultrathin nitride interfacial layer formed by rapid thermal NH<sub>3</sub> treatment” *Applied Surface Science*, 364, 747–751, (2016), **SCI-IF-4.439**.
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57. Patil Vilas; Agrawal Khushabu; Barhate Viral; Patil Sumit; **Mahajan Ashok** XPS study of Homemade Plasma Enhanced Atomic Layer Deposited La<sub>2</sub>O<sub>3</sub>/ZrO<sub>2</sub> Bilayer Thin Films" Submitted to semiconductor science and Technology –SST, Article reference: SST-104933
58. Anil G. Khairnar and **Ashok M. Mahajan** "Effect of post-deposition annealing temperature on high permittivity HfO<sub>2</sub> based gate stack on surface passivated germanium" submitted to Journal of NASA(Physical Science) Journal Of Indian Academy of Sciences. **IF-0.82**.

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59. "Influence of Plasma Power Variation on The Properties of La<sub>2</sub>O<sub>3</sub> Ultra-thin Films Grown by Indigenously Developed PEALD System" Viral N. Barhate, Sumit R. Patil, Vilas S. Patil, Khushabu Agrawal, and **A. M. Mahajan** presented in International conference on "Innovations in Nanomaterials and Their Applications" (ICINA-2018) held at L. V. H. Arts, Science & Commerce Collage, Panchavati, Nashik, during 18<sup>th</sup>-20<sup>th</sup> Jan 2018 pp. 17.
60. "Plasma Enhanced Atomic Layer Deposition System Process Automation using Programmable Logic Controller" Vilas S. Patil, Khushabu Agrawal, Viral Barhate, Sumit Patil and **A. M. Mahajan**, presented in University level research festival "Avishkar 2017", presented at NMU Jalgaon during 29<sup>th</sup> -30<sup>th</sup> December 2017. (Awarded First Prize for "University Level").
61. "Spin on low-k thin films for inter layer dielectric (ILD) applications" Anil Gaikwad, Swati Gupta and **Ashok Mahajan** presented in "Materials for Advanced Interconnects and Packaging MAIP-2017" at North China University of Technology (NCUT), Beijing, China during 15<sup>th</sup> Oct. – 17<sup>th</sup> Oct. 2017.
62. "Surface modification of La<sub>2</sub>O<sub>3</sub> high-k dielectric thin films deposited on Si and Ge: a comparative study", Khushabu Agrawal, Vilas Patil, Viral Barhate, Sumit Patil And **Ashok Mahajan**, presented in International Conference on Nanoscience and Nanotechnology (ICONN 2017), SRM University, Chennai, India. 9<sup>th</sup>-11<sup>th</sup> August 2017 pp. 532.
63. "Microwave assisted annealing of metal organic decomposed lanthanum cerium oxide: a case study", Viral N. Barhate, Khushabu S. Agrawal, Vilas S. Patil, Sumit R. Patil, **Ashok Mahajan**, presented in International Conference on Nanoscience and Nanotechnology (ICONN 2017), SRM University, Chennai, India. 9<sup>th</sup>-11<sup>th</sup> August 2017 pp. 480.
64. "Effect of rapid thermal annealing on structural properties of Sol-gel based lanthanum doped cerium oxide thin films", Sumit Patil, Vilas Patil, Khushabu Agrawal, Viral Barhate and **Ashok Mahajan**, presented in International Conference on Nanoscience and Nanotechnology (ICONN 2017), SRM University, Chennai, India. 9<sup>th</sup>-11<sup>th</sup> August 2017 pp. 485.
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72. “Evolution of Ge/SiO<sub>2</sub>/HfO<sub>2</sub> Multilayer Structure for High Speed MOS Devices Application” Khushabu S. Agrawal, Vilas S. Patil, and **Ashok M. Mahajan** presented and published in National Conference on Electronics Materials Thin Film and its Applications (NCEMTFA), speed journal of research in electronics II, 77-80, (2016) to held at Jalgaon, Maharashtra, India during 9<sup>th</sup> to 10<sup>th</sup> December 2016.
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77. Sol-gel deposited xerogel and aerogel low-k films’, Anil S. Gaikwad, Swati A. Gupta and **Ashok M. Mahajan** delivered short invited talk in Second International Conference on Advanced Materials for Power Engineering (ICAMPE-2016) held during 11<sup>th</sup>-13<sup>th</sup>Nov. 2016 at Mahatma Gandhi University, Kottayam, Kerala, India.
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80. “High permittivity HfO<sub>2</sub> thin film on surface passivated germanium”, Vilas S Patil, Khushabu Agrawal, Rahul S. Salunke, Anil G. Khairnar and **A. M. Mahajan** presented in 18<sup>th</sup> International Workshop on Physics of Semiconductor Devices (IWPSD-2015) held at Indian Institute of Science Bangalore, Karnataka, India, during 7<sup>th</sup> -10<sup>th</sup> Dec 2015 abstract published on pp. 279.
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84. “Synthesis and characterization of silica aerogel thin films”, Anil Gaikwad, Yogesh Mhaisagar and **Ashok Mahajan**, presented in International Symposium on Semiconductor Materials and Devices (ISSMD 3 - 2015) held at Crystal Growth Centre, Anna University, Chennai, Tamilnadu, India during 2<sup>nd</sup>-5<sup>th</sup> February 2015.
85. “Effect of annealing on current conduction mechanism in high-k dielectric thin films deposited on silicon substrates”, Anil G. Khairnar, Pranita A. Deshmukh, Vilas S. Patil, Khushabu S. Agrawal and **A. M. Mahajan** presented in Pacific Rim Symposium on Surfaces, Coatings and Interfaces (Pacsurf 2014) conference held at Kohala Coast, HI, USA. During 8<sup>th</sup>-10<sup>th</sup>Dec, 2014.
86. “Silica Aerogel Thin Films: Synthesis and Characterization”, Anil Gaikwad, Yogesh Mhaisagar and **A. M. Mahajan**, presented in International Conference 3<sup>rd</sup> Global Sustainable Biotech Congress 2014 (GSBC-2014) held at North Maharashtra University, Jalgaon, India during 1<sup>st</sup>-5<sup>th</sup> December 2014 and abstract published in conference proceeding. **(Recipient of “Best Poster Award”)**.



87. "Effect of 200 MeV  $\text{Ag}^{15+}$  ions on sol-gel deposited silica low-k thin films", Anil Gaikwad, Yogesh Mhaisagar, K. Asokan and **A. M. Mahajan**, presented in International conference on Swift Heavy Ions in Materials Engineering and Characterization (SHIMEC 2014) held at Inter University Accelerator Centre, New Delhi during 14<sup>th</sup>-17<sup>th</sup> October 2014 and abstract published in conference proceeding.
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  173. “Effect of O<sub>2</sub>/TEOS flow rate ratio on the growth of SiO<sub>2</sub> films using PECVD system”, **A M Mahajan**, L S Patil, J P Bange and D K Gautam, Presented in an international Conference “PHOTONICS-2002” at TIFR, Mumbai, during 16<sup>th</sup>-18<sup>th</sup>, Dec.2002, Published in Abstract book on pp286.
  174. “Optimization of process parameters for the growth of SiO<sub>2</sub> film using TEOS-PECVD system”, **A M Mahajan**, L S Patil, J P Bange and D K Gautam, Presented in the national symposium on instrumentation (NSI-27) during Oct-2002, Published in Abstract book on pp-121.
  175. “Study of optical characteristics of Bio membrane for designing and fabrication of Bio sensors for Bio-medical applications”, A N Ardad, **A M Mahajan**, M D Shirsath, Presented in international Conference Broad Band Optical Fiber Communication Technology (BBOFCT-2001), Published in Proceeding pp-369-373.
  176. “Effect of channel width on the field spreading in channel Substrate planer blue laser diode”, D S Patil, **A M Mahajan** and D K Gautam, Presented in international Conference “BBOFCT-2001”, Published in Proceeding pp-239-242.
  177. “Effect of Chamber pressure variation on the R. I. of SiO<sub>2</sub> films deposited by PECVD”, **A M Mahajan**, L S Patil, J P Bange and D K Gautam, Presented in international Conference “BBOFCT-2001” at North Maharashtra University, Jalgaon during 5<sup>th</sup>-7<sup>th</sup> Dec.2001, Published in Proceeding pp-283-286.
  178. “Comparative study of SiO<sub>2</sub> film grown by thermal CVD and PECVD”, L. S. Patil, **A. M. Mahajan**, J.P. Bange, and D. K. Gautam, Presented at National Symposium on Science and Technology of Vacuum and thin films at IISc Bangalore, held during Sept-5-7, 2001, Extended abstract published in proceedings as pp19.
  179. “Design and fabrication of TEOS-PECVD System for high growth rate”, **A. M. Mahajan**, L. S. Patil, J.P. Bange and D. K. Gautam, Presented at National Symposium on Science and Technology of Vacuum and thin films at IISc Bangalore, held during Sept- 5<sup>th</sup>-7<sup>th</sup>, 2001, Abstract published in proceedings as pp18.
  180. “Growth and Characterization of SiO<sub>2</sub> films for the fabrication of Optical Waveguides”, **A. M. Mahajan**, L. S. Patil, J.P. Bange, and D. K. Gautam, Presented in 2<sup>nd</sup> International Conf. and XXVII Annual Convention of Opt. Soc. India (OPTONICS 2001), held at Thiruvananthapuram during 27<sup>th</sup>-29<sup>th</sup> August-2001 Extended abstract published in proceedings on page 8 & 9.
  181. “Simulation of Process parameters of PECVD machine,” A. B. Patil, **A. M. Mahajan** and D. K. Gautam, Presented in “National workshop/symposium on WDM technology” at



North Maharashtra University, Jalgaon on 22/03/2001, First prize of research paper Award winner.

182. "Development of TEOS-PECVD machine for the growth of SiO<sub>2</sub> films for optoelectronics applications", **A M Mahajan**, L.S.Patil, J. P. Bange and D K Gautam, Presented in "National symposium on WDM technology" at North Maharashtra University Jalgaon on 22/03/2001.
183. "Development of TEOS-CVD machine for the growth of SiO<sub>2</sub> films for optoelectronics applications", **A M Mahajan**, L.S.Patil, J. P. Bange & D K Gautam, Presented in "Research Symposium on Recent Trends in Electronics and information Technology" at North Maharashtra University, Jalgaon on 28/02/2000.
184. "Performance of active-R Filter in presence of positive feedback", **A.M. Mahajan & A. B. Kadam**, Presented in the National Symposium on instrumentation organized at S. V. University, Tirupati during 09/01/94 to 12/01/94., Abstract published in the proceeding as C-67 on page 38.

### **Books Edited/Published:**

#### **International/National conference Proceedings co-edited: 03**

- 01) Abstract book of National conference on "Materials & Devices for Future Technology, North Maharashtra University, Jalgaon held on 7<sup>th</sup> March 2011 edited by **A.M. Mahajan**.
- 02) Proceedings of an International conference BBOFCT-2001 held at, NMU, Jalgaon during 5<sup>th</sup>-7<sup>th</sup> December-2001, Co-edited by **A.M. Mahajan**.
- 03) Proceedings for an International conference ICOT-2004 held at, NMU, Jalgaon during 12<sup>th</sup> to 14<sup>th</sup> January-2004, Co-edited by **A.M. Mahajan**.

### **➤ Academic (Organizational) Involvements:**

#### **1. Chairman:**

1. Board of Examiners and paper setters for M.Sc. Electronics, North Maharashtra University, Jalgaon since July-2002 to July-2005 and 2009-2010.  
Local Inquiry Committee (LIC) to visit various colleges of NMU

#### **2. Secretary:**

1. National workshop on Optical Integrated Circuits and systems (**OICS- 2004**) Organized by Department of Electronics, North Maharashtra University, Jalgaon during 29<sup>th</sup>-30<sup>th</sup> July-2004
2. International Conference entitled "International Conference on Optoelectronics Technology (**ICOT-2004**)" Organized by Department of Electronics, North Maharashtra University, Jalgaon during 12<sup>th</sup>-14<sup>th</sup> January 2004.
3. International Conference entitled "Broad Band Optical Fiber Communication Technology (**BBOFCT-2001**)" Organized by Department of Electronics, North Maharashtra University, Jalgaon during 3-7, Dec-2001

#### **3. Coordinator:**

1. 2 days F2F training batch for Capacity Building for faculty members of KBCNMU by EU trainer from Cyprus on "**Assessment and Grading**" during 29<sup>th</sup> and 30<sup>th</sup> August-2018 under CABCIN project.
2. 2 days F2F training batch for Capacity Building for faculty members of NMU by EU trainer from Poland on "**Diversity management at workplace in the context of HEIs**" during 19 and 20<sup>th</sup> July-2018 under CABCIN project.

3. CABGIN Project Management Board (**PMB**)-1 Meeting during **14<sup>th</sup> – 17<sup>th</sup>Feb. 2018** at North Maharashtra University, Jalgaon, Jointly organized by WrUST, Wraclaw and North Maharashtra University.
4. M.Sc. Electronics examination of North Maharashtra University, Jalgaon, June 2009 to Dec. 2011.
5. Recent trends in Electronic devices and materials (**RTEDM-2007**) organized by Dept. of Electronics, North Maharashtra University, Jalgaon on 21<sup>st</sup> March 2007
6. National Seminar on Intellectual Property Rights (**NSIPR-2005**) Organized by North Maharashtra University, Jalgaon to be held during 27<sup>th</sup>-28<sup>th</sup>, Sept-2005.
7. **SEC-2004**, Organized by Department of Electronics, North Maharashtra University, Jalgaon on 1<sup>st</sup> March-2004.

#### **4. Convener:**

1. **1<sup>st</sup>CABGIN INFO Day Seminar** on “Technology Allied Capacity Building in Higher Education: A Paradigm Shift” at North Maharashtra University, Jalgaon” on **28<sup>th</sup>March 2018**.
2. National conference on “Materials & Devices for Future Technology, organized by School of physical Sciences, North Maharashtra University, Jalgaon on **7<sup>th</sup> March 2011**.

#### **5. Patron:**

1. International Conference on Cross cultural political and economic dimension of global business North American and Asian perspective, **27<sup>th</sup> -28<sup>th</sup> May-2016, Cetys University, Mexico (Jointly organized by NMU & Cetys)**.
2. National conference on Algebra Analysis and functional mathematics (**NCAAFM-2016**), **29-30 Jan. 2016**, School of Mathematical Sciences, North Maharashtra University, Jalgaon, India.
3. One day National Workshop on ‘Advances in Materials Processing’, **8<sup>th</sup> March 2014**, School of Physical Sciences, North Maharashtra University, Jalgaon, India.
4. National conference on Managing Economic Downturn, **2<sup>nd</sup>-3<sup>rd</sup> Nov. 2012**, School of Management Studies, North Maharashtra University, Jalgaon, India.

#### **6. Co-Patron:**

1. International Conference 3rd Global Sustainable Biotech Congress 2014 (GSBC-2014), 1-5 December 2014, held at North Maharashtra University, Jalgaon, India.
2. International Opportunities for Latest Developments in Chemistry and Technology – 2014 (GOLD-CT-2014), 6-8 Feb. 2014 held at North Maharashtra University, Jalgaon, India.
3. National conference on ‘Application Oriented Hindi and Media Writing’, 26th Feb. 2014, School of Language Studies and Research Centre, North Maharashtra University, Jalgaon, India.

#### **7. Executive Member:**

1. Invited as an expert member of the international advisory committee for 2<sup>nd</sup>International workshop on “Materials for Advanced Interconnects and Packaging” held at North China University of Technology (**NCUT**) during **15<sup>th</sup> Oct. – 17<sup>th</sup> Oct. 2017 Beijing, China**.

2. National conference on the present scenario of Indian higher education system: strength, weakness opportunities and threats, **13-14 August 2015**, VasantNaik Arts, Science and Commerce College, Shahada, Dist. Nandurbar, India.

➤ **Workshops/Conferences/Seminar/Schools Attended:**

- 1) 2 days F2F training batch for Capacity Building for faculty members of KBCNMU by EU trainer from Cyprus on “**Assessment and Grading**” during 29<sup>th</sup> and 30<sup>th</sup> August-2018 under CABGIN project attended/co-ordinated.
- 2) Participated on behalf of KBCNMU in Roundtable meeting of Maharashtra Public State University Representatives with Consulate of US and Representatives of US Institutions on “**Opportunities for Academic Linkages: Roundtable**” at US Consulate General’s Office BKC-Mumbai held on 24<sup>th</sup> August 2018.
- 3) One Day IEEE IPR workshop 2018 on “**Patent Publishing in India - A Paradigm Shift for Innovation in Academics**” organized by IIT Mumbai on 23<sup>rd</sup> August-2018.
- 4) 2 days F2F training batch for Capacity Building for faculty members of NMU by EU trainer from Poland on “**Diversity management at workplace in the context of HEIs**” during 19 and 20<sup>th</sup> July-2018 under CABGIN project attended/co-ordinated.
- 5) 1 day symposium on ( In Marathi) “**Vidnyan aani Tantradnyanachya aadhare sampatti nirmiti**” organized jointly by North Maharashtra University and Marathi Vidnyan Parishad, Maharashtra state, on 10<sup>th</sup> July-2018 at NMU, Jalgaon.
- 6) **1<sup>st</sup> CABGIN INFO Day Seminar** on “Technology Allied Capacity Building in Higher Education: A Paradigm Shift” at North Maharashtra University, Jalgaon” on 28<sup>th</sup> March 2018.
- 7) Workshop on “IPR issues in research” at Dr. Annasaheb G.D. Bendale Mahila Mahavidyalaya, Jalgaon on **13<sup>th</sup> March 2018**.
- 8) CABGIN Project Management Board (PMB)-1 Meeting of European and Indian Universities during 14<sup>th</sup> – 17<sup>th</sup> Feb. 2018 at North Maharashtra University, Jalgaon, Jointly organized by WrUST, Wraclaw and North Maharashtra University.
- 9) WP3 meeting of Erasmus+ funded consortium project CABGIN during 24<sup>th</sup> – 26<sup>th</sup> January 2018 at WrUST, Wraclaw, Poland.
- 10) Maharashtra Rajya Marathi Vishwakosh and NMU organized “Abjaunsh Tantradnyan” workshop during 9<sup>th</sup>-10<sup>th</sup> Jan 2018 at NMU Jalgaon.
- 11) 2<sup>nd</sup> International workshop on “Materials for Advanced Interconnects and Packaging” held at North China University of Technology (NCUT) during 15<sup>th</sup> Oct.– 17<sup>th</sup> Oct. 2017 Beijing, China.
- 12) International workshop on ‘Establishment of Capacity Building Centers as a Sustainable Solution to Raise the Standards of Teaching Staff in Indian HEI’s CABGIN held at SAL Education, Ahmedabad, during 21<sup>st</sup> – 22<sup>nd</sup> Sept- 2017
- 13) International workshop on ‘Establishment of Capacity Building Centers as a Sustainable Solution to Raise the Standards of Teaching Staff in Indian HEI’s CABGIN held at Fredrick University, Cyprus during 06<sup>th</sup> – 07<sup>th</sup> July 2017.
- 14) International workshop on ‘Establishment of Capacity Building Centers as a Sustainable Solution to Raise the Standards of Teaching Staff in Indian HEI’s CABGIN held at Parul University, Vadodara during 20<sup>th</sup> – 22<sup>nd</sup> March 2017.

- 15) International workshop on “Materials or Advanced Interconnects” held at North China University of Technology (NCUT) during 29<sup>th</sup> Oct. -2<sup>nd</sup> Nov. 2016 Beijing, **China**.
- 16) National Research and Academia Conclave: Towards a TB-Free India held on 9<sup>th</sup> July 2016 at Trident-BandraKurla Complex, Mumbai organized jointly by N M U Jalgaon, India and The Union of South East Asia.
- 17) Workshop under Higher Education Leadership Academy (HELA) organized by SPD, RUSA 8<sup>th</sup> -9<sup>th</sup> Jan.-2016, Mumbai, **India**.
- 18) E-MRS-2015 organized during 15-18 Sept. 2015 by European Materials Research Society at Warsaw, Poland.
- 19) West Zone Vice-Chancellor’s Meet held during 26<sup>th</sup> -27<sup>th</sup> Nov. 2015 at Kolhapur, **India** organized by AIU New Delhi.
- 20) New National Educational Policy, State level conference on 3<sup>rd</sup> Nov. 2015 at Sydenham College, Mumbai, **India** organized by govt. of Maharashtra (Higher & Technical Education Department).
- 21) Round Table Conference on ‘Globalization of Higher Education in the State of Maharashtra: Way Forward’ on 28<sup>th</sup> August 2015 at the Convocation Hall, Fort Campus, Mumbai, **India**.
- 22) All India Vice-Chancellors’ Meet under the aegis of All India Universities Association during 23<sup>rd</sup> -25<sup>th</sup> May-2015 at Lovely Professional University, Panjab, **India** as a representative of VC, NMU.
- 23) International Symposium on Global Engineering Education held during 19<sup>th</sup> to 20<sup>th</sup> March 2015 at University of Tokushima, **Japan**.
- 24) International Conference 3<sup>rd</sup> Global Sustainable Biotech Congress 2014 (GSBC-2014) during 1-5 December 2014 held at North Maharashtra University, Jalgaon, India.
- 25) International Conference on Energy, Environment and Sustainable Economy (ESEE 2013) held during 1<sup>st</sup>-3<sup>rd</sup> December, 2013 in Bangkok, **Thailand**.
- 26) “International symposium on global engineering education” at University of Tokushima, during 3<sup>rd</sup>-5<sup>th</sup> March 2013 in **Japan**.
- 27) Govt. of India MHRD organized international conference on community colleges, “Mainstreaming skills education: creating relevant human resource, during 6<sup>th</sup> -7<sup>th</sup> Feb. 2013”, at New Delhi, **India**.
- 28) 13<sup>th</sup> International Conference on the formation of Semiconductor interfaces (ICFSI-13) held during 3<sup>rd</sup> -8<sup>th</sup> July 2011 at Prague, **Czech Republic**.
- 29) International Conference on Electronics Engineering and Signal Processing (EESP 2011) held during 27<sup>th</sup> -29<sup>th</sup> May 2011 at **Maldives**.
- 30) National Conference on “Materials & Devices for Future Technology, held on 7<sup>th</sup> March 2011 North Maharashtra University, Jalgaon, **India**.
- 31) International Symposium on Semiconductor Materials and Devices (ISSMD 2011) held during 28<sup>th</sup> –30<sup>th</sup> Jan. 2011 at M. S. University of Baroda, Vadodara, **India**.
- 32) Material research symposium (MRS-2010) held during 5<sup>th</sup> -9<sup>th</sup> April 2010 at San Francisco, CA, **USA**.
- 33) National conference on Materials for Energy Storage and Conversion (NCMES-2010) held during 23<sup>rd</sup>-24<sup>th</sup> Jan. 2010 at Department of Physics, Shri. Venkateshwara University, Tirupati, **India**.
- 34) International Winter School for Graduates (IWSG 2009) held during 30<sup>th</sup> Nov. - 5<sup>th</sup> Dec. 2009 at IIT Mumbai, **India**.

- 35) 2<sup>nd</sup>INUP workshop on nanofabrication technologies held at during 30<sup>th</sup> -31<sup>st</sup> May 2009 at IIT Mumbai, **India**.
  - 36) IWDTF-08, International workshop on dielectric thin films for future ULSI technology held during 5<sup>th</sup> -7<sup>th</sup> Nov-2008 at Tokyo Institute of Technology, Tokyo, **Japan**.
  - 37) One day workshop on accelerator based research on polymer science held on 25<sup>th</sup> August 2008 at Inter University Accelerator Center, New Delhi, **India**.
  - 38) XIV International workshop on the Physics of Semiconductor Devices IWPSD 2007 held during 16<sup>th</sup>-20<sup>th</sup> Dec. 2007 at IIT, Mumbai, **India**.
  - 39) 14<sup>th</sup> International conference on Physical Failure and Analysis (IPFA-2007) held during 11<sup>th</sup> -13<sup>th</sup> July 2007 at Bangalore, **India**.
  - 40) Raman Memorial Seminar-2007 held on 28<sup>th</sup> Feb 2007 at North Maharashtra University, Jalgaon, **India**.
  - 41) ICMNT-06, held during 19<sup>th</sup> -23<sup>rd</sup> Nov. 2006 at TiziOuzou, **Algeria**.
  - 42) Pre seminar workshops on Sensors (NSPTS-11) held during 25<sup>th</sup> -26<sup>th</sup> Feb. 2006 at Department of Electronics, University of Pune, Pune, **India**.
  - 43) NSIAE-2006 held during 28<sup>th</sup> -29<sup>th</sup> Jan. 2006 at A, S&C College, Chopda, **India**.
  - 44) International conference ICMCTF-2004 held during 19<sup>th</sup>-23<sup>rd</sup> April -2004 at San Diego, CA, **USA**.
  - 45) International conference ICOT-2004, held during 12<sup>th</sup> -14<sup>th</sup> Jan. 2004 at North Maharashtra University, Jalgaon, **India**.
  - 46) International conference ICMCTF-2003 held during 28<sup>th</sup> April to 2<sup>nd</sup> May 2003 at San Diego, CA, **USA**.
  - 47) XXVIII Optical Society of India Conference on Optics and Photonics in Engineering (COPE-03), held during 6<sup>th</sup> -8<sup>th</sup> Jan. 2003 at NSIT, New Delhi, **India**.
  - 48) International Conference “BBOFCT-2001” during 5<sup>th</sup> -7<sup>th</sup> Dec. 2001 at North Maharashtra University, Jalgaon, **India**.
  - 49) 2<sup>nd</sup>International Conf. and XXVII Annual Convention of Opt. Soc. India (OPTONICS 2001) held during 27<sup>th</sup> -29<sup>th</sup> Aug. 2001 at Thiruvananthapuram, **India**.
  - 50) National Symposium on WDM Technology” held on 22<sup>nd</sup> March 2001 at North Maharashtra University Jalgaon, **India**.
  - 51) Research Symposium on Recent Trends in Electronics and Information Technology” held on 28<sup>th</sup> Feb. 2000 at North Maharashtra University, Jalgaon, **India**.
  - 52) National Symposium on instrumentation organized held during 9<sup>th</sup> – 12<sup>th</sup> Jan. 1994 at S. V. University, Tirupati, **India**.
- **Invited/Popular/Honorary Talks Delivered: 32**
1. Delivered talkon “Low-k and High-k based MOS Devices for advance CMOS technology”**in the Department** of Materials Science and Engineering, **NTUST, Taipei, Taiwan**during 25<sup>th</sup> May-2018.
  2. Speaker for state level ‘LONAR SCIENCE FESTIVAL’ at Late Ku. Durga K. Banmeru Science College, Lonar & Swami Ramanand Teerth Marathwada University, Nanded on 27<sup>th</sup> to 28<sup>th</sup> Feb. 2018.
  3. Keynote speaker on “IPR issues in research” at Dr. Annasaheb G.D. Bendale Mahila Mahavidyalaya, Jalgaon on 13<sup>th</sup> March 2018.

4. Invited talk entitled “High-k/low-k thin films based MOS devices for advanced CMOS technology” at Department of Materials Science and Engineering, NCTU, Hsinchu, **Taiwan** on 20<sup>th</sup> Oct. 2017.
5. Invited talk entitled “Dielectric thin films based MOS devices for advanced CMOS technology” delivered at Applied Physics department, China Agricultural University, Beijing, **China** on 17<sup>th</sup> Oct. 2017.
6. Invited talk entitled “Spin on low-k thin films for inter layer dielectric (ILD) applications” delivered at North China University of Technology (NCUT) during 15<sup>th</sup> Oct. – 17<sup>th</sup> Oct. 2017 Beijing, **China**.
7. Invited talk entitled “Development of Low-k Film in North Maharashtra University delivered at North China University of Technology (NCUT) during 29<sup>th</sup> Oct. -2<sup>nd</sup> Nov. 2016 Beijing, **China**.
8. A talk entitled, “International collaborations of North Maharashtra University: a case of European educational institutions”, delivered at School of Physical Sciences, North Maharashtra University, Jalgaon 4<sup>th</sup> October 2015.
9. A talk entitled, “Promoting internationalization in higher education at North Maharashtra University”, delivered in International Symposium on Global Engineering Education held at University of Tokushima, Tokushima, Japan during 19<sup>th</sup>-20 March 2015.
10. A talk entitled, “Novel Dielectric Materials and MOS Structures for Future ULSI Technology”, delivered at CETYS University, Ensenada campus, Mexico on 1/6/ 2014.
11. A talk entitled “Research methodology and research career”, delivered at Dr. Babasaheb Ambedkar Marathwada University, Aurangabad on 21<sup>st</sup> June 2014.
12. A talk entitled “Role of INUP CEN facility in improvement research activity”, delivered at CEN, IIT Bombay during ‘1<sup>st</sup> Familiarization Workshop Phase II’ on 26<sup>th</sup> May 2014.
13. A talk entitled “Leadership role of North Maharashtra University promoting innovation in engineering education”, delivered at University of Tokushima, Japan during “International symposium on global engineering education” during 3<sup>rd</sup>-5<sup>th</sup> March 2013.
14. A talk entitled “Introduction to Nanoelectronics”, delivered at University Department of Chemical Technology, North Maharashtra University, Jalgaon during AICTE sponsored Staff Development Program on 'Recent Advances in Polymer Technology' during June 15-30, 2011.
15. A talk entitled “Nanofabrication Techniques”, delivered at University Department of Chemical Technology, North Maharashtra University, Jalgaon during Second Professional Certificate Course on Nanotechnology during 11<sup>th</sup> -15<sup>th</sup> May 2011.
16. A talk entitled “Introduction to Nanoelectronics”, delivered at University Department of Chemical Technology, North Maharashtra University, Jalgaon during May 2010.
17. A talk entitled “Recommendation of national knowledge commission “at Dr. Annasaheb G.D. Bendale Mahila Mahavidyalay, Jalgaon during Jan. 2010.
18. A talk entitled “Nanofabrication and nanolithography”, delivered at University Department of Chemical Technology, North Maharashtra University, Jalgaon during Dec. 2009.
19. A talk entitled “IC fabrication technology”, delivered at Suresh dada Jain Engineering College, Jalgaon during Feb. 2008.
20. A talk entitled “Material Deposition Systems” delivered to the participants of refresher course conducted by Dr. Babasaheb Ambedkar Marathwada University, Aurangabad during Oct. 2007.

21. An invited talk entitled “Dielectric films for Micro/Nano Electronics Applications” delivered in the 2<sup>nd</sup> National seminar on Materials preparation and characterization held at Dept. of Physics, RTM Nagpur University, Nagpur during 30<sup>th</sup>- 31<sup>st</sup> March 2007.
22. Delivered a popular lecture on “Career Opportunities in Electronics after B.Sc.” at Dr. Annasaheb G.D. BendaleMahilaMahavidyalaya, Jalgaon during Jan. 2007.
23. A talk entitled “IC fabrication Technology” delivered to the participants of refresher course conducted by Dr. Babasaheb Ambedkar Marathwada University, Aurangabad during 2006.
24. A talk entitled “Growth and Characterization of Low-k dielectric films for microelectronics Applications” delivered at Liquid crystal research center at University of Calabria, Rende, Cosenza, Italy during Nov. 2006.
25. An invited talk entitled “design and fabrication of PECVD system for high growth rate deposition of SiO<sub>2</sub> films” delivered to the participants of DST sponsored National workshop OICS-2004 held at North Maharashtra University, Jalgaon during 29-30 July 2004.
26. A talk entitled “VLSI fabrication technology” delivered to the graduate and master students at Korea Advanced Institute of Science and Technology (KAIST), Daejeon, South Korea on 28<sup>th</sup> April 2004.
27. A talk entitled “development of PECVD system for high growth rate deposition of SiO<sub>2</sub> films” delivered to the researchers of Photonics research center at Korea Institute of Science and Technology (KIST), Seoul, South Korea on 27<sup>th</sup> April 2004.
28. An invited guest lecture entitled “VLSI fabrication technology” delivered for the E& TC students of S B T Engineering College, Bambhori, Jalgaon March 2004.
29. An invited talk entitled “development of PECVD system for the deposition of SiO<sub>2</sub> films” during an international conference ICOT-2004 held at North Maharashtra University, Jalgaon during Jan. 2004”.
30. Talk delivered to the participants of refresher course in Physics conducted by North Maharashtra University, Jalgaon as a resource person during Nov. 2001.
31. Honorary talk delivered to the participants at Academic Staff College, Jawaharlal Technological University, and Hyderabad Sept. 2001.
32. Honorary Lecture delivered at the Academic staff College, Karnataka University, Dharwad to the participants of Refresher course Nov. 1993.

➤ **Awards and Honors:**

1. Awarded Foreign Expert Project entitled “**OVERSEAS FAMOUS TEACHER AWARD**” by Ministry of Education (ME) and State Administration of Foreign Experts Affairs (SAFEA), China for two years (1st Oct-2018 to 30th Sept-2020) to provide expert visits for 60 days/year in College of Science, China Agricultural University (CAU), Beijing and Micro electronics Deptt, North China University of Technology (NCUT), Beijing, China

2. Delivered lectures series in the **Department** of Materials Science and Engineering, **NTUST, Taipei, Taiwan** as a **'Visiting Professor'** during 22<sup>nd</sup> May to 1<sup>st</sup> June 2018 based on own research contribution/expertise.
3. Invited as an expert member of the international advisory committee for 2<sup>nd</sup> International workshop on **"Materials for Advanced Interconnects and Packaging"** held at North China University of Technology (NCUT) during 15<sup>th</sup> Oct. – 17<sup>th</sup> Oct. 2017 Beijing, **China**.
4. Shortlisted in **top 5** for the post of **Vice-Chancellor, Yashwantrao Chavan Maharashtra Open University**, Nashik, India and had interactions with Hon'ble Chancellor Sir on 22<sup>nd</sup> Feb. 2017 at Rajbhavan Mumbai.
5. Shortlisted in **top 5** for the post of **Vice-Chancellor, North Maharashtra University**, Jalgaon, India and had interactions with Hon'ble Chancellor Sir on 20<sup>th</sup> Oct. 2016 at Rajbhavan Mumbai.
6. Worked as an **actg. Vice-Chancellor of North Maharashtra University**, Jalgaon, India for 10 days.
7. Shortlisted for the post of **Director, NAAC, Bangalore** and had interaction with the expert committee on 24<sup>th</sup> July 2015 at UGC, New Delhi.
8. Served as the **"Registrar", Chief Administrative Officer of North Maharashtra University**, Jalgaon (9<sup>th</sup> Jan. 2012 to 8<sup>th</sup> Jan 2017).
9. **Chaired a session** in west zone Vice-Chancellor's Meet held at Shivaji University, Kolhapur, India organized by AIU New Delhi during 26<sup>th</sup> -27<sup>th</sup> Nov. 2015.
10. **Best Research Award** (2012-13) of N M U Jalgaon, India.
11. **Research & Development Award** (2013-14) of N M U Jalgaon, India.
12. **Chaired a session** in west zone Vice-Chancellor's Meet held at Shivaji University, Kolhapur, **India** organized by AIU New Delhi during 26<sup>th</sup> -27<sup>th</sup> Nov. 2015.
13. Worked as a Chairperson in Electronics Engineering session of EESP-2011 held at Maldives during 27<sup>th</sup>-29<sup>th</sup> May-2011.
14. **Invitation fellowship** was awarded by IEEE EDS Bangalore chapter to attend IPFA-2007 held at Bangalore during 11<sup>th</sup> -13<sup>th</sup> July-07.
15. Worked as a **Chairperson** in microelectronics session of ICMNT-06 held at TiziOuzou, Algeria during 19<sup>th</sup>-23<sup>rd</sup> Nov-2006.
16. Received **travel grant** award from ICMNT06 (ICTP, Italy) to participate in CMNT06 held at TiziOuzou, Algeria during 19<sup>th</sup>-23<sup>rd</sup> Nov-2006.
17. A competitive student award (post doc) of approx. \$1000 from AVS, USA to attend ICMCTF-04 for research paper submitted to international conference ICMCTF-04 held during 19<sup>th</sup>-23<sup>rd</sup> April-2004 at Sand Diego, CA, USA.



## Significantly contributed while working on the following positions of the university ( NMU):

- **Chairman**
  - ✓ Eklavya Training Centre, Nandurbar
  - ✓ Hostel Management Committee
  - ✓ Anticorruption Cell
  - ✓ Committee for University Officers, Non-Teaching staff's evaluation for their promotion.
  - ✓ Financial Committee for UGC NET Exam. 2013 (at NMU Jurisdiction).
- **Secretary:**
  - ✓ Senate (Jan-2012- Jan-2017)
  - ✓ Management Council (Jan-2012- Jan-2017)
  - ✓ Academic Council (Jan-2012- Jan-2017)
  - ✓ Building and Works committee (Jan-2012- Jan-2017)
  - ✓ Selection committee for teaching staff and administrative officers (Class I)(Jan-2012- Jan-2017)
  - ✓ University Standing Advisory Committee (the "Think Tank")(Jan-2012- Jan-2017)  
Establishment of 'Think Tank' is the unique activity of NMU for advising timely to various issues/aspects in order to make NMU as a globally competitive university.
- **Member:**
  - ✓ Research and Recognition committee for Board of Studies in "**Electronics and Instrumentation**" under Science and Technology faculty, NMU, Jalgaon ( 20 July-2018 to Aug-2022)under section 37(2) (a)(iv) of Maharashtra Public universities act-2016.

### Board of Governance

- ✓ University Department of Chemical Technology, NMU, Jalgaon. ( 2014-2017)
- ✓ Government College of Engineering, Jalgaon.(2015- Jan-2018)  
(Prof Mahajan has contributed significantly towards the timely development of the UICT, NMU and Govt.Engg.College, Jalgaon through the various meetings ofBoG based on his experience).

### Academic Council

- ✓ Government College of Engineering, Jalgaon.(2013- 2018)

### Board of Management

- ✓ Community College, Nandurbar. (Jan-2014- Jan-2017)
- ✓ Ordinance and Statutes assessment/checking committee headed by Director, Higher Education constituted by Govt. of Maharashtra (since 2012).  
(This is very important committee constituted by the Govt. of Maharashtra for properly shaping, justifying whether to approve or not the statues/ordinance submitted by various state universities in Maharashtra to Rajbhavan).
- ✓ Library Committee(Jan-2012- Jan-2017)
- ✓ Finance and Accounts Committee(Jan-2012- Jan-2017)
- ✓ Purchase Committee(Jan-2012- Jan-2017)
- ✓ publication Committee(Jan-2012- Jan-2017)
- ✓ Internal Quality Assurance Cell (IQAC)(Jan-2012- Jan-2017)
- ✓ Assessment and accreditation procedures
- ✓ Student Welfare Advisory Committee
- ✓ Central Training and Placement Cell Advisory Board
- ✓ SC/ST Cell Advisory Committee

- ✓ Student Grievances Committee
- ✓ Kendriya Vidyalaya Management Committee, NMU, Jalgaon
- ✓ National Service Scheme Advisory Committee
- ✓ Budget Monitoring Committee
- ✓ University Fund Utilization,
- ✓ Monitoring and Evaluation Committee
- ✓ Anticorruption Cell
- ✓ Maharashtra District Innovation Council for Dhule and Jalgaon district.
- ✓ Expert committee for the evaluation of performances of Research Students for the award of 'Shri. Gyanchand H. Raisonni Doctoral Fellowship'
- ✓ Selection Committee for the selection of Statutory Officer Controller of Examinations, Finance and Accounts Officer at Dr. BAMU, Aurangabad.

### **Additional responsibilities successfully undertaken**

- **Coordinator: Rashtriya Uchchatar Shiksha Abhiyan (RUSA) at NMU, Jalgaon**  
(During June 2014 to 8<sup>th</sup> Jan. 2017)  
Played an active role to get sanction of the funds from the RUSA for NMU and its proper utilization timely.
- **Director: Tribal Academy at Nandurbar**  
(Jan. 2014 to 8<sup>th</sup> Jan. 2017)  
Played an active role to get sanction of the 25 acres of land to NMU for establishing Tribal Academy at Nandurbar from Govt. of Maharashtra/Collectorate Nandurbar. Also, played role in establishing community college of NMU at Nandurbar by obtaining funds from UGC.
- **BCUD Director, NMU (Additional Charge) :**  
21<sup>st</sup> Aug. 2012 to 03<sup>rd</sup> Sept. 2012, 23<sup>rd</sup> to 27<sup>th</sup> March 2015,  
20<sup>th</sup> to 25<sup>th</sup> July 2015, 30<sup>th</sup> Nov. 2015 to 4<sup>th</sup> Dec. 2015  
And 26<sup>th</sup> Feb. 2016 to 04<sup>th</sup> March 2016.
- **Vice-Chancellor, NMU (Additional Charge):**

22<sup>nd</sup> to 30<sup>th</sup> May 2016

## ➤ Administrative Profile: [Administrative Experience gained]

Successfully completed the 5 years tenure of "**Registrar**", **Chief Administrative Officer of North Maharashtra University**, Jalgaon, (during 9<sup>th</sup> Jan. 2012 to 8<sup>th</sup> Jan. 2017).

### ⇒ **Organization of Major Events:**

- **Special convocation ceremony** (March 2012) organized for conferment of Honorary D. Litt. Degree on **Esteemed Smt. Pratibha Devisingh Patil**, President of India by NMU, and Inaugural ceremony of convocation Auditorium and corner stone lying ceremony of ST Girls and Boys Hostels at the auspicious hands of Esteemed Smt. Pratibha Devisingh Patil former President of India on 24<sup>th</sup> March 2012.
- 20<sup>th</sup> convocation ceremony (26<sup>th</sup> May 2012) graced by **Hon'ble Prof. Sukhdev Thorat**, **Chairman, ICSSR, New Delhi** and former Chairman UGC, New Delhi.
- 21<sup>st</sup> convocation ceremony (9<sup>th</sup> April 2013) graced by **Hon'ble Vice President of India Esteemed Shri. M. Hamid Ansari. Hon'ble Governor of Maharashtra State Esteemed Shri. K. Sankaranarayanan** and conferred honorary D. Litt. Degree on eminent scientist, Father of Green Revolution in India Hon'ble **Prof. M. S. Swaminathan** in convocation ceremony and Corner stone laying ceremony of the extension of School of Life Sciences building at the auspicious hands of Hon'ble Prof. M. S. Swaminathan.
- 22<sup>nd</sup> convocation ceremony (21<sup>st</sup> May 2014) was graced by renowned scientist **Hon'ble Ex. President of India Esteemed Dr. A P J Abdul Kalam as a chief guest and Hon'ble Dr. Anil Kakodkar**, Chairman Rajiv Gandhi Sci. Technology Commission, Mumbai & former Chairman of Atomic Energy Commission of India (AEIC) New Delhi, graced as guest of honor. The Corner Stone laying ceremony of Vidyarthi Bhavan at the auspicious hands of **Esteemed Dr. A P J Abdul Kalam**.
- Cornerstone laying ceremony of the Karmachari Bhavan & inauguration of Digital Knowledge Centre & Raupya Mahotsava Vatika was held at the auspicious hands of **Esteemed Shri. K. Sankarnarayanan**, Hon'ble Governor of Maharashtra on 7<sup>th</sup> August, 2014.
- 23<sup>rd</sup> convocation ceremony (16<sup>th</sup> March 2015) was graced by **Hon'ble Prof. V. K. Jain, Vice-Chancellor of Doon University, Dehradun**.
- 24<sup>th</sup> convocation ceremony (6<sup>th</sup> June 2016) was graced by **Hon'ble Prof. Ramesh Chand, Member, NITI Aayog, Govt. of India, New Delhi**.

### ⇒ **Interaction/discussion with eminent personalities:**

- ✓ Prof. Mahajan had opportunity to have one to one interaction regarding university with several eminent personalities/Scientists of the country and abroad. Includes, **Hon'ble Shri. Kailash Satyarthi** (Nobel Laureate), **Hon'ble Late Dr. A P J Abdul Kalam** (former President of India), **Bharat Ratna Esteemed Prof. CNR Rao**, **Hon'ble Dr. Anil Kakodkar** (Chairman, RGSTC, Maharashtra State), **Prof. J. V. Narlikar**, Renowned Indian Astrophysicist, **Prof. M. S. Swaminathan**, Father of Green Revolution in India, **Hon'ble Prof. Ramesh Chand** (Member of NITI Aayog, New Delhi), some of the Hon'ble Ministers of State and Central Government, Members of Parliament, Members of Legislative Assembly (Maharashtra State), etc. on behalf of NMU during last **five years**.
- ✓ Prof. Mahajan had an opportunity to participate in the several important state level meetings of VCs, statutory officers with Hon'ble Minister for Higher and Technical Education, Hon'ble Chief Secretary, Govt. of Maharashtra State, Principal Secretary of Higher and Technical Education and also with secretary to Hon'ble Chancellor at Mumbai during last **five years**.

✓ Prof. Mahajan had meetings/presentations/discussions with RUSA team, RUSA Directorate and national level expert committee at national and state level regarding R&D projects.

⇒ He had fruitful meetings and discussions/presentations with the authorities/experts from MHRD, UGC, DST, CSIR, INSA, DRDO, BRNS, AICTE, etc. regarding funding support to NMU.

⇒ **Presented the following proposals to the different Govt. funding agencies on behalf of NMU and got sanction of :**

1. 8 line Swimming Pool at NMU (UGC, New Delhi) grant of **Rs. 2.25 Crores.**
2. Woman's Hostel for 75 Girls (UGC, New Delhi) grant of **Rs. 1.25 Crores.**
3. Community College at Nandurbar (UGC, New Delhi) grant of **Rs. 70.00 Lacs.**
4. Tribal Academy at Nandurbar (Along with Hon'ble Vice Chancellor Sir) from Govt. of Maha., obtained the **25 Acre Land** with rigorous follow up at various levels.
5. Rashtriya Uchchatar Shiksha Abhiyan (RUSA) (MHRD, New Delhi) at various levels and got **Rs. 20.00 Crores** sanctioned as RUSA coordinator.
6. Biodiversity Park at NMU (under process) Govt. of Maharashtra with rigorous follow up at various levels for **Rs. 8.4 Crores.**

⇒ **To promote the research environment among the students, researchers, faculty and non-teaching staff of the university research and performance based motivational awards were instituted and distributed since year 2012.**

*Defined the criteria for the awards and executed effectively by taking leading role along with other NMU stake holders.*

➤ **Instituted in consultation with Hon'ble Vice-Chancellor Research Award for University Teachers (as a Patent, best Publication and best funding award.**

➤ **Instituted in consultation with Hon'ble Vice-Chancellor Research Award for College Teachers (Patent).**

➤ **Following awards are being given on University foundation day every year under the guidance of VC Sir :**

Best Faculty Award (University Campus), Best Faculty Award (College Level), Best Administrative Officer Award (Class 1 & Class 2), Best Non-Teaching Staff Award (Class 3 & Class 4), Best College Award (Colleges), Best Library User Award (University Campus), Best Daily Wages Staff Award (University Campus)

⇒ **New Buildings/ Schools/Departments have been built through the construction department of NMU under the guidance of Hon'ble Vice Chancellor:**

1. VVIP Guest House, UGC XII Plan, 6500 sq. ft.
2. Dr. A P J Abdul Kalam Vidyarthi Bhavan (67000 sq. ft.)

**Having facilities such as:**

Student facility center, E-Suvidha, NSS, NCC, Students welfare, Seminar Hall, Auditorium Hall with capacity 300 peoples, Girl's hostel, foreign student's hostel.

3. School of Mathematical Sciences Building Phase II.

4. School of Life Science Building Phase II.

5. Karmachari Bhavan having recreation hall for employees, Karmachari society and Unions office.

6. Uttam Vidya Nagari Karmachari Vasahat for class III & IV employees having 1354 sq.ft. spacious blocks.

7. Babu Jagajivanram SC girls hostel for 200 girls funded by Ministry of Social Justice and Empowerment, Government of India.

8. Minority Girls Hostel for 100 girls, funded by Ministry of Minority Affairs, Government of Maharashtra.

**Crucial role played for internationalization of NMU:**

*Prof. Mahajan as a liaising officer, have signed and made operational as many as 25 MoUs with international and national universities/institutions/industries of high repute*

*under the guidance of Hon'ble Vice Chancellor for the national and international exchange of students, faculties etc. Out of which 3 MoUs were personally initiated by Prof. Mahajan as follows:*

- University of California, Riverside, USA. MoU Signed on 5<sup>th</sup> June 2014
- Tokushima University, Tokushima, Japan. MoU Signed on 4<sup>th</sup> May 2014.
- Wroclaw University of Technology, Wroclaw, Poland. MoU Signed on 6<sup>th</sup> May 2016.

In view of the process of internationalization of NMU endeavor for the promotion of academic and research collaboration, Prof. Mahajan had discussion with eminent scientists, professionals from foreign academic institutions and research laboratories. Some of them includes, Prof. Murakami (Director, CICEE, Tokushima University, Japan), Marco Funiculi (IMM-CNR, Agrate Brianza, Milan, Italy) Prof. Carlos Gonzalez, Prof. Scott Venezia Corral (CETYS University, Mexico), Dr. Thomas Schroeder (IHP, Germany), Prof. Toshohiro Moriga (Tokushima University), Prof. Lukasz Wojdyga (Director, CIC, Warsaw University of Technology, Poland), Prof. Andy Kummel (University of California, San Diego, USA) Prof. Ashok Mulchandani (University of California, Riverside, USA) etc.

➤ **Social Responsibility:**

- Actively involved as a **Registrar** in the adoption of undeveloped five villages in the periphery of NMU specially tribal and rural areas since its inception.
- Crucial role played in effective implementation of **SMART VILLAGE** project of NMU under the guidance of Hon'ble Vice Chancellor.
- Organized village level meeting with farmers, villagers regarding awareness about **TB Free India Mission** among the farmers residing in the smart villages along with health center staff.
- To build inclusive social capital among students, a summit entitled '**Samata Students Enlightenment Summit**' organized during 6<sup>th</sup> - 7<sup>th</sup> Feb. 2016 at North Maharashtra University, Jalgaon (MS) as a key core team member.
- Successfully implemented University schemes like, **Karmveer Bhaurao Patil 'Earn and Learn Scheme'**, '**Eklavya Vidyadhan Scheme**', '**Babasaheb Ambedkar Hostel Scholarship**' to help the economically backward students through student welfare department.
- Encouraged and actively participated in various '**Tree plantation**' program of NMU, **Clean India and Digital India mission of Govt. of India.**
- Frequently attended a special awareness workshops organized by Hon'ble Vice Chancellor for farmers in rural area under **Lab to land** program of NMU.
- Actively participated in view of strengthening the dialogue and relations between the industrialists, under **Lab to industry** scheme of NMU.
- Took special emphasis on regular organization of '**Blood donation camp**' in NMU region.

**Place: Jalgaon**

**Date: 15<sup>th</sup> Sept- 2018**

**(Prof. A. M. Mahajan)**