CAREER PROFILE

Name - Nitin Deorao Ghawghawe

Date of Birth- 01/09/1964

Address for Correspondence - 25, Aurelia Apartment

Tatya Tope Nagar Nagpur -440022

Profession - Professor (Electrical Engg.)

Govt. College of Engg. Nagpur State- Maharashtra (India)

Qualifications- Ph.D.(Electrical) from VNIT Nagpur, M.E.(Electrical Power Systems),

And B.E.(Electrical) from Govt COE Amravati, M.B.A. from Nagpur

University

Experience- 31 Years of teaching in Technical Institutions

Project/Research Work of major importance carried out -

- Design of software in AL to control Traffic Light Signals
- Design of Light Intensity Meter
- Marketing of Agricultural Inputs (M.B.A. Research work)
- Design of Automatic control of Street Lights
- Microprocessor Based Universal Protection System Real Time Case Study (M.E. Research Work)
- Design & Fabrication of Under-frequency Relay using Microprocessor (recipient of INAE national award)
- PC based Automatic Load Shedding
- Microprocessor Based PCB Drilling Machine etc
- Automated Energy saving Microcontroller based system
- Modeling and Simulation of Separately Excited DC Motor Drive Using MATLAB/SIMULINK
- Impact of Generator Participation Factor on Available Transfer Capability of a Power System Network
- Lossy Transformer Model for Computation of Transient Voltage

Ph.D. Thesis-

 Some Studies on Available Transfer capability Evaluation and its Enhancement for Congestion Management in Deregulated Environment

Seminars/Conferences -

- Papers Presented at National Conferences- 08
- Papers Presented at International Conferences- 08 (Includes One IEEE International conference at Singapore)



Attended 15-Short term Courses and 5-Workshops

Memberships/Posts -

- Life Membership of IEI
- Life Membership of ISTE
- Life Membership of IETE
- Academic Guide for M.B.A. Course (Appointed by ICFAI)

Technical Strengths-

- Publications (List Enclosed)-
 - International Journals- 14
 - o International Conerences-16
 - o National Journal-04
 - o National Conferences-07
- Proficiency in the software namely
 - o Electronics Workbench
 - o Power Word Simulator
 - o MATLAB
 - o PSCAD
 - o PSIM
- Expertise in
 - o Power System Analysis and Computation
 - Optimization Techniques
 - o Microprocessor and Microcontroller based Systems
 - o Power Systems Deregulation
 - o Power System Automation
 - o FACTS

Responsibilities Held-

- Appointed as Ph.D. Supervisor for S.G.B. Amravati University Amravati and for R.T.M. Nagpur University Nagpur
- Worked as a reviewer for IJEPES Science Direct Journal
- Worked as a reviewer for IEEE International Conferences
- Worked as a member of various committees of D.T.E. Govt. of Maharashtra
- Worked as Head of the Deptt. –Electrical, Instrumentation Engg.
- Worked on the posts of Dean(Academic), Dean(Admin)
- Member, Board of Management, Govt. C.O.E. Amravati
- Member, Senate Govt. C.O.E. Amravati
- Member, Examination Committee, Govt. C.O.E. Amravati
- Member, Board of Studies (Electrical Engineering Board)
- Worked as Joint Secretary of International Seminar COGEN-08 organized by Institute of Engineers (India) Nagpur

- Worked on several committees of various seminars/workshops organized by Institute of Engineers (India) Nagpur
- Worked as a member of advisory committee of National level Technical Meet "ERIKA" at G.H.R.C.O.E. Nagpur
- Working as Ph.D Supervisor for 03 Research Scholars
- Worked as Ph.D Supervisor with 02 candidates awarded/submitted
- Worked as a Chairman for Affiliation Committee, Babashaeb Ambedkar Technical University Lonere
- Reviewer for various International Journals viz. IJEPES Elsevier Publication, IEEE Conferences etc
- RPC Member for monitoring the progress of Ph.D Work of the research scholars at Govt. C.O.E. Aurangabad and BATU Lonere
- Awarded Ph.D to one candidate as supervised

Major recent Achievements-

- Recipient of Devang Mehta Award for Best Professor in Electrical Engineering
- Recipient of Siemens Hackathon Award for the Project as guided to the UG Students
- Recipient of INAE National Award for the Project as Guided to UG students
- Best Conference Paper award at IPEC2007, IEEE International Conference held at Singapore
- Nominated in World's Who's Who Dictionary
- One research paper recognized amongst 25 Hot Topics of Science Direct Journals January-March, 09

Dr. N.D.Ghawghawe

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(Detailed Information is Overleaf)

Self Appraisal

- 1. Guided to the Project titled Microprocessor based Under Frequency Relay which received the Best project award given by Indian National Academy of Engineering
- 2. Paper titled "ATC Evaluation with Consideration of Load Changes and Participation Factors- A Sensitivity Analysis Approach" selected as the best paper at IEEE International Power Engineering Conference (IPEC-2007) Organized by IET, IES, IEEE Nanyang Tech University Singapore
- 3. Selected amongst top 25 hottest articles of "International Journal of Electrical Power & Energy Systems" by Elsevier
- 4. Selected amongst Who's Who in the World 2011 Edition. (Letter issued in March 2010
- 5. Selected as Ph.D. Supervisor for S.G.B. Amravati University Amravati
- 6. Selected as Ph.D. Supervisor for R.T. M Nagpur University Nagpur
- 7. Working as a Supervisor to 04 Ph.D. Scholars at S.G.B.Amravati University Amravati
- 8. Worked as Member/Chairman for various Institute level committees
- 9. Received 05 Outstanding (A+) and rest Excellent (A) confidential reports (between 2000-2014)
- 10. Worked as Convener for "IEEE International Conference on Power, Automation and Communication (INPAC 2014)" held in Oct 2014

List of Research Publications

Journal Publications -

- 1. N.D.Ghawghawe, K.L.Thakre, "Modified Method of Computing Generator Participation Factors by Electricity Tracing with Consideration of Load Flow Changes" *WSEAS International Journal of Transactions on Power System ISSN: 1790-5060* Vol.2, Issue 10, Oct-2007 p.p.-233-238.
- 2. N.D.Ghawghawe, K.L.Thakre, "Computation of TCSC Reactance and Suggesting Criterion of its Location for ATC Improvement" *International Journal of Electrical Power and Energy Systems* (Elsevier) ISSN: 0142-0615 Feb.2009, 31(2) pp.86-93
- 3. N.D.Ghawghawe, K.L.Thakre, "Tracing the Flow of Electricity in 400 kV MS Grid" *National Magazine "Electrical India"* Oct. 2008, 48(10) pp. 60-68
- 4. D.S.Takbhoure, N.D.Ghawghawe, "Power Transformer Model For Computation Of Winding Losses At High Frequencies" *Journal of Information, Knowledge And Research in Electrical Engineering ISSN: 0975 6736* Vol.1, Issue 02, Oct-11 pp. 38-43
- 5. P.R.Rane, N.D.Ghawghawe, "Available Transfer Capability Computation Using Generator Participation Factor" *Journal of Information, Knowledge And Research in Electrical Engineering ISSN: 0975 6736* Vol.1, Issue 02, Oct-11 pp. 24-29
- 6. P.R.Rane, N.D.Ghawghawe, "Congestion Management By Changing Generator Participation Factor" *Journal of Information, Knowledge And Research in Electrical Engineering ISSN: 0975 6736* Vol.1, Issue 02, Oct-11 pp. 30-37
- 7. R.V.Thakur and Dr.N.D.Ghawghawe, "Improvement of transient stability of system using unified power plow controller", *International Journal of Advances in Management, Technology & Engineering Sciences ISSN: 2249-7455*, Vol. 1, Issue 3 (1), Dec.2011, pp. 149-153.
- 8. Amit Shiwalkar and N. D. Ghawghawe "Power Flow Control through Transmission Line with UPFC to Mitigate Contingency" *International Journal of Advanced Electrical and Electronics Engineering* (*IJAEEE*) Vol. 1 Issue 02, 2012, pp. 64-69
- 9. A. D. Borkhade and N. D. Ghawghawe, "Detection and Classification of Transmission Line Faults Using Wavelet Transform" *International Journal of Scientific & Engineering Research*, Vol. 5, Issue 2, February-2014 pp. 1229-1234

- 10. Pooja Kulkarni and N. D. Ghawghawe, "A Review paper on Optimal Location and Parameter Setting of FACTS to Improve the Performance of Power System" *International Journal of Electrical, Electronics and Data Communication*, Vol. 1 (4) pp. 1-5
- 11. U.V.Takpire and N.D.Ghawghawe, "Line Parameter Sensitivity for Improvement in Power Flow Condition" *International Journal of Engineering Research and Applications (IJERA) ISSN: 2248-9622* April 2014 pp. 17-20
- 12. Mayuri R. Nutkut and N. D. Ghawghawe, "Identification of generation Source at Consumer Entity of Deregulated System", *International Journal of Industrial Electronics and Electrical Engineering IISN:* 2347-6982, Vol. 3 (5), May 2015 pp. 76-81
- 13. Amol A. Kalage and N. D. Ghawghawe, "Impact of Time Multiplier Setting Range on Optimum Coordination of Directional Overcurrent Relays" STM Journal of Power Electronics and Power Systems Vol. 4(3) pp. 33-40
- 14. A. A. Malik and N. D. Ghawghawe, "Determination of Generator Participation in Loads and Lines using Extended Incidence Matrix method", *International Journal of Scientific & Engineering Research ISSN: 2229-5518*, Volume 6, Issue 2, February- 2015 pp. 1124-1128
- 15. Amol A. Kalage and N.D.Ghawghawe, "Optimum Coordination of Directional Overcurrent RelayUsing Modified Adaptive Teaching Learning Based Optimization Algorithm", *International Journal of Intelligence and Systems Springer Publications*(2016) pp. 55-71
- 16. Pooja Kulkarni and N. D. Ghawghawe, "Hybrid DA-PSO approach for optimal location and parameter settings for TCSC controller in power system" *International Journal-IET Generation, Transmission & Distribution The Institution of Engineering and Technology* (2019) ISSN:1751-8687 Volume 14, Issue 7 pp. 1222-1232
- P. Jamodkar, P.Kumbhare, S. Kubde, S. Sahastrabuddhe and N.D.Ghawghawe, "Energy Meter to Prevent Electricity Theft by Power Tapping with Automatic Billing Facility" *Vidyabharati International Interdisciplinary Research Journal (Special Issue) ISSN: 2319-4979*, pp. 113-117

Journals Publication (Acceptance Communicated)-

1. N.D.Ghawghawe, K.L.Thakre, "ATC Evaluation with Consideration of Load Changes and Participation Factors-A Sensitivity Analysis Approach" *International Journal of Institution of Engineers Singapore*

Conferences Publications-

- 1. N.D.Ghawghawe, K.L.Thakre, "Power Flow Sensitivity Analysis in Deregulated Environment" *International Seminar on Power Transmission Research Interests and Challenges* organised by Central Power Research Institute, Banglore, *India*. Dec. 2005.
- 2. N.D.Ghawghawe, K.L.Thakre, "Application of Power Flow Sensitivity Analysis and PTDF for Determination of ATC", *IEEE International Conference on Power Electronic Drives and Energy Systems (PEDES-06)* Organized by PES IES PEIS at IIT New Delhi, India. Dec. 2006 pp.1-7.
- 3. N.D.Ghawghawe, K.L.Thakre, "Assessment of Feasible Transactions in a Deregulated Power System A Grid Security Aspect" *IEI National Conference on Grid Safety and Security (GRIDSAFE-07)* at Institute of Engineers (India) Nagpur, April 2007 pp.-108-112
- 4. N.D.Ghawghawe, K.L.Thakre, "ATC Evaluation with Consideration of Load Changes and Participation Factors- A Sensitivity Analysis Approach" *IEEE International Power Engineering Conference (IPEC-2007)* Organized by IET, IES, IEEE Nanyang Tech University Singapore. Dec. 2007 pp.-124-129.
- N.D.Ghawghawe, K.L.Thakre, "Detection of Network Congestion in Deregulated System with Renewable Sources" *IEI National Seminar on Non-Conventional Energy Sources and Urban/Rural Economy in Developing Countries (COGEN-2008)* 9-10 Feb 2008, Organized by IEI Nagpur pp.-91-98.

- 6. N.D.Ghawghawe, K.L.Thakre, "Determination of the Impact of Load Variations on Generator Participations" *POWERCON2008 IEEE Power India International Conference*
- 7. S.D.Wadhai, N.D.Ghawghawe, "Application of SVC, TCSC and UPFC in Power System for Power Flow Control" *National Conference on Advancing Trends in Engineering & Management Technologies (ATEMT-09)* organised by Ramdeobaba Kamala Nehru Engineering College Nagpur, *India*. November 20-21, 2009
- 8. K.M.Narkhede, N.D.Ghawghawe, "Shunt Active Power Filter for Harmonic Elimination & reactive Power Compensation in Electric Power System" *National Conference on Advanced Power System (NCAPS-09)* organised by K.K.Wagh Institute of Engineering Education & Research Nasik, *India*. December 11-12, 2009
- 9. K.M.Narkhede, N.D.Ghawghawe, "Instantaneous Power Theory Based Shunt Active Filter- A MATLAB Based Simulation" *National Conference on Instrumentation and Control NCIC'10* organised by Pravara Rural Engineering College Loni, *India*. February 24-25, 2010
- 10. S.D.Wadhai, N.D.Ghawghawe, "Simulation of TCSC in Power System for Power Flow Control" *National Conference on Instrumentation and Control NCIC'10* organised by Pravara Rural Engineering College Loni, *India*. February 24-25, 2010
- 11. S.D.Wadhai, N.D.Ghawghawe, "Power Flow Control Using TCSC in Power System" *International Conference on Sunrise Technologies iCOST 2011* organised by B.S.D.College of Engineering and Polytechnic Dhule, *India*. Jan13-15, 2011
- 12. P.R.Rane, N.D.Ghawghawe, "Determination of Network Transfer Capability Using Generator Participation Factor" *National Conference on "Challenges to Indian Power Scenario by 2020"* (NCCIPS2020-11) organised by Vithalrao Vikhe Patil College of EngineeringAhmednagar, *India* February 24-25, 2011
- 13. Sarika S. Satpute, N.D.Ghawghawe, "Analysis, Modeling and Simulation of Single Phase Seperately Excited DC Motor Drive Using MATLAB/SIMULINK" *National Conference on "Challenges to Indian Power Scenario by 2020" (NCCIPS2020-11)* organised by Vithalrao Vikhe Patil College of Engineering Ahmednagar, *India* February 24-25, 2011
- 14. P.R.Rane, N.D.Ghawghawe, "Effect of Generator Participation Factor on Network Transfer Capability" *National Conference on Electric Machines and Power Systems (EMPS-2011)* organized by Pondicherry Engineering College Pondicherry, *India*. February 11, 2011 p.p. 31-35
- 15. Sarika S. Satpute, N.D.Ghawghawe, "Modeling of DC Drive System Using MATLAB/SIMULINK" *National Conference on Electric Machines and Power Systems (EMPS-2011)* organized by Pondicherry Engineering College Pondicherry, *India*. February 11, 2011 p.p. 163-167
- 16. Sarika S. Satpute, N.D.Ghawghawe, "Modeling and Simulation of Single Phase Separately Excited DC Motor Drive Using MATLAB/SIMULINK" National Conference on Recent Trends in Electrical & Electronics Engineering organized by Jerusalem College of Engineering, Chennai India. March 8-9, 2011
- 17. R.V.Thakur and Dr.N.D.Ghawghawe, "Improvement of transient stability of system using unified power flow controller", *International Conference on Issues and Advances in Business, Management, Engineering and Social Sciences (IABMESS)*, Pune, India, Dec. 20, 2011.
- 18. R.V.Thakur and N.D.Ghawghawe, "Enhancement of Transient Stability of System Using Unified Power Plow Controller (UPFC) Under Fault Conditions", *IEEE International Conference on Computing, Electronics, and Electrical Technology (ICCET-2012)*, Kumaracoil, Tamilnadu, India, March 21-22, 2012. pp. 198-202
- 19. Amol.A. Kalage and N.D. Ghawghawe, "Optimum Coordination of Directional Overcurrent Relays in Presence of Distributed Generation" *IEEE International Conference*
- 20. Amol.A. Kalage and N.D. Ghawghawe, "A Protection Scheme for Optimum Coordination of Directional Overcurrent Relays in Presence of Distributed Generation" *IEEE International Conference*
- 21. Jadhav Bhagyashri and Ghawghawe Nitin, "Selecting Bilateral Transactions for Minimum Losses in Deregulated Power Systems- An Assignment Model Approach" 6th IEEE International Conference on Modeling and Simulation 2015 pp. 175-178

Conferences Publications (Acceptance Communicated)-

- 1. N.D.Ghawghawe, K.L.Thakre, "Detection of Network Congestion in Deregulated System with Applied Transactions" WSEAS International Conference and Journal of "Transactions on Power System"
- 2. N.D.Ghawghawe, K.L.Thakre, "Computing the Generator Participations in Line- Flows Using Proportional Sharing Principle" *International Conference of World Academy of Science, Engineering And Technology* at Bangkok

International-National Seminars/Conferences Attended

International Conferences/Seminars Attended-

- 1. *International Seminar on Power Transmission Research Interests and Challenges organized* by Central Power Research Institute, Banglore, *India*. Dec. 2005
- 2. *IEEE International Conference on Power Electronic Drives and Energy Systems (PEDES-06)*Organized by PES IES PEIS at IIT New Delhi, India. Dec. 2006
- 3. *IEEE International Power Engineering Conference (IPEC-2007)* Organized by IET, IES, IEEE Nanyang Tech University Singapore. Dec. 2007
- 4. *POWERCON2008 IEEE Power India International Conference* Organized by PES IES PEIS at IIT New Delhi, India. Oct-08

National Seminars Attended-

- 1. *National Convention on Electrical Power Systems* 7th-8th March 1998 at SSGM College of Engg. Shegaon (Maharashtra)
- 2. *IEI National Conference on Grid Safety and Security (GRIDSAFE-07)* at Institute of Engineers (India) Nagpur, April 2007
- 3. *IEI National Seminar on Non-Conventional Energy Sources and Urban/Rural Economy in Developing Countries (COGEN-2008)* 9-10 Feb 2008, Organized by IEI Nagpur
- 4. National Seminar on Application Energy Management and Optimization in Chemical, Mechanical and Electrical Industries 11-12 February 2003 organized by Institute of Engineers (India) and Dr. C.V.Raman Institute of Technology Nagpur

Short Term Training Programmes Attended-

- 1. **ISTE sponsored STTP** on "Non-Conventional Energy Sources" at G.P.Nagpur
- 2. TTTI Bhopal organized "Industrial Training Programme for Teachers"
- 3. DTE Mumbai organized Induction Phase-I Programme at Govt. Polytechnic Amravati
- 4. **DTE Mumbai organized** Induction Phase-II Programme at Govt. Polytechnic Nagpur
- 5. Attended Quality Improvement Programme organized by Department of Electrical Engineering, IIT Powai Mumbai
- 6. Participated in STTP on Advances in Power Electronics held at VNIT Nagpur

Significant Contribution to teaching/Academic Education Environment Institutional Corporate Life

- 1. Worked as *Professor In-charge for Library* for the duration from 01.04.02 to 30.06.05
- 2. Worked as MODORBS Co-ordinator for the Automation of Institute's Library
- 3. Working as Principal Investigator of AICTE sponsored RPS project on "Available Transfer Capability Enhancement Using TCSC
- 4. Worked as *Head of the Department (Electrical)* for the duration from 23.03.2000 to 30.06.2001.
- 5. Worked as *Head of the Department (Instrumentation*) for the duration from 01.08.08 till 25.06210
- 6. Worked as **Dean (Acad)** from 07.07.2010 to 15.06.2013
- 7. Working as **Dean (Administration)** from 01.07.2013 till date
- 8. Worked as *Officer In-charge* for University Examinations
- 9. Worked as *Officer In-charge* for GATE-09
- 10. Working/Worked as a *Guide for PG dissertation* of as many as 15 candidates and several UG Candidates
- 11. Worked as chairman of paper setting committee, evaluator, moderator, external examiner of S.G.B. Amravati University Amravati
- 12. Working as Head of the Department at Govt College of Engineering Nagpur since August 2016
- 13. Worked as Dean (Admin) at Govt College of Engineering Nagpur from August 2016 to Oct. 2021
- 14. Worked as I/C Principal at Govt College of Engineering Nagpur from 8.10.2020 to 5.10.2021

Positions held as Committee Members/Chairman

- 1. Chairman, Board of Studies, Instrumentation Board
- 2. Chairman, Academic Programme Evaluation Committee (APEC)
- 3. Member, Board of Studies, Electrical Board GCOE Amravati
- 4. Member of Academic Board
- 5. Member of Examination Committee
- 6. Member, Board of Management of the Institute
- 7. Member, Board of studies, Biomedical Electronics Board, S.G.B. Amravati University Amravati
- 8. Member of Finance Committee
- 9. Member of Building Works Committee
- 10. Member, Board of Studies, Electrical Board RTMNU Nagpur, RKNEC Nagpur, JDCOE Nagpur

Adequate Extension and Field Out-reach Activities

- 1. Delivered Expert Lecture On "Power System Deregulation" at *Institute of Engineers (India) Nagpur*
- 2. Appointed as Academic Guide for M.B.A. under ICFAI University
- 3. Delivered Expert Lecture in STTP at Anjuman College of Engineering Nagpur
- 4. Delivered Expert Lecture in STTP at G.H.Raisoni College of Engineering Nagpur
- 5. Worked as a Paper Reviewer for the *Elsevier's International Journal of Electrical Power and Energy Systems*
- 6. Worked as a Paper Reviewer for the papers at the *IEEE International Conferences- INDICON-08*, *ICETET-09* and *IEI International Seminar COGEN-08*
- 7. Worked as Technical Committee Member for All India Seminar on "Harmonics in Electrical Systems" (HARMONICA-2009) organised by Institution of Engineers Nagpur
- 8. Worked as an Expert for IBPS for recruitment of Jr. Technicians of Mahavitran
- 9. Worked as an Expert Committee Member as appointed by AICTE and DTE for inspection of new technical Institute
- 10. Life member of Indian Society for Technical Education (ISTE), Institution of Electronics and Telecommunication Engineers (IETE) and Institute of Engineers India (IEI)
- 11. Worked as an Expert for UGC selection committee

Development of Course Material/monogram

- 1. Published patent on "Available transfer capability improvement using TCSC" No. 393/MUM/2010 dt. 25-06-2010
- 2. Developed the Lab Manual of the subject "Electrical Circuit and Network" published by MSBTE