Faculty Profile
(For booklet and website)

Name: Shashi Bhushan Kotwal

Designation: Assistant Professor

Department: Electronics & Communication Engineering

Email ID: kotwal.sb@smvdu.ac.in, sbkotwal@gmail.com

Contact Number and Extn.: 01991-285535, Extn:2331

Qualification: M.Tech , B.E. (E&TC)

Experience: 15 Years

Teaching: 15 Years   Research: 8 years   Administration: 10 years   Total: 15 Years

Areas of Interest / Specialization:

1. Digital Signal Processing
2. Embedded Systems
3. Adhoc and Sensor Networks

Research Profile

Research Projects Undertaken:

S. No.	Role	Title	Funding Agency	Current Status (Closed/ Running)
1	PI	Development of location technique for two and three dimensional wireless sensor networks (UGC)	UGC	Closed
2	Co-PI	Design & Demonstration Of Set Of Algorithms For High Reliability Wireless Data Acquisition & Control (ISRO)	ISRO	Closed

Research Publications:

S. No.	Year	Publication
1	2017	Nazeer, T; Gupta, S; Kotwal, SB, "A Review of Grid Connected Photovoltaic Systems" International Journal of Emerging Technologies in Engineering Research, vol. 5, no. 9, pp.20,30, Sep. 2017.
2	2016	Issmat Shah Masoodi, Sumeet Gupta, Shashi Bhushan Kotwal, "Energy Efficient Routing and Coverage Using Modified Fire-Fly Algorithm in Wireless Sensor Networks", International Journal of Communication System and Networks, (IJCSN) Vol.6, No.1, Mar (2016), 36-44.
3	2012	S. B. Kotwal, Shekhar Verma, and R. K. Abrol. "Approaches of Self Localization in Wireless Sensor Networks and Directions in 3D." International Journal of Computer Applications 50.11 (2012): 1-10.
4	2012	S. B. Kotwal, Shekhar Verma, and R. K. Abrol. "RSSI WSN localization with Analysis of Energy Consumption and Communication." International Journal of Computer Applications 50.11 (2012): 11-16.
5	2010	S.B. Kotwal, Shekhar Verma, G.S. Tomar, R.K. Abrol, and Suryansh, "One Anchor Distance and Angle Based Multi - Hop Adaptive Iterative Localization Algorithm for Wireless Sensor Networks" International Journal of Grid and High Performance Computing, 2(3), 31-44, US. July-September 2010.

Books Publications:

S. No.	Year	Publication

Conference Publications:

S. No.	Year	Conference	Publication
1	2017	International Conference on Soft Computing Applications in Wireless Communication – (SCAWC 2017), 2017, Guru Nanak Dev Engineering College, Ludhiana, India.	S.B.Kotwal, Chahat Jain.: "Rssi Based 3D Localization in Wireless Sensor Networks", *in the proceedings of International Conference on Soft Computing Applications in Wireless Communication – (SCAWC 2017), 2017,* Guru Nanak Dev Engineering College, Ludhiana, India.
2	2012	National Seminar on Wireless Communication and Computer Networks, 2012, SMVDU, J&K.	Himani Baru, Tushar, and S.B.Kotwal.: "Review of 3D Localization in Wireless Sensor Networks," *in the Proceedings of National Seminar on Wireless Communication and Computer Networks, 2012, SMVDU, J&K.*
3	2010	IEEE sponsored International conference on Computational Intelligence and Communication Network (CICN), 2010, Bhopal.	S.B. Kotwal, S.Verma, Suryansh, and Arnav Sharma.: "Region Based Collaborative Angle of Arrival Localization for Wireless Sensor Networks with Maximum Range Information," *in the proceedings of IEEE sponsored International conference on Computational Intelligence and Communication Network (CICN), 2010, Bhopal.*
4	2009	IEEE Wireless Communication and Sensor Networks (WCSN), 2009 Fifth IEEE Conference on , vol., no., pp.1-6, 15-19 Dec. 2009. Allahabad.	S.B.Kotwal, S. Nigam, S. Verma, and R.K. Abrol.: "Multi hop multi anchor geometrical computation based localization algorithm for wireless sensor networks with limited communication," *IEEE sponsored Wireless Communication and Sensor Networks (WCSN), 2009 Fifth IEEE Conference on , vol., no., pp.1-6, 15-19 Dec. 2009. Allahabad.*
5	2009	First International Conference on Computational Intelligence, Communication Systems and Networks, (CICSYN), pp.149-154, 2009 Indore.	S.B. Kotwal, Shekhar Verma, G.S. Tomar, and R.K. Abrol.: "MAIL: Multi-Hop Adaptive Iterative Localization for Wireless Sensor Networks," *First International Conference on Computational Intelligence, Communication Systems and Networks, (CICSYN), pp.149-154, 2009 Indore.*
6	2009	National Conference NGCIS-09, MIET, J&K.	Sumeet Gupta, S.B.Kotwal, Sonika Gupta.: "Industrial Data Acquisition Applications Using Wireless Sensor Networks - Issues & Challenges", *presented in a National Conference NGCIS-09, MIET, J&K.*
7	2009	Proceedings of National Conference NCSP-2009, MIT-Aurangabad, Maharashtra.	A.K. Pandit, S.B.Kotwal. : "Frame skipping analysis of edge based preprocessed quad tree for mobile video format", *in the Proceedings of National Conference NCSP-2009, MIT-Aurangabad, Maharashtra.*

Research Supervised:

S. No.	Year	Role	Research Topic	Status
1	2015	Co-Supervisor	Enhancement In Reliability and Availability of WSN Using Compressed Based Routing	Completed
2	2015	Supervisor	A Modified Variable Step Size Incremental Conductance MPPT Algorithm for Photovoltaic Systems	Completed
3	2014	Supervisor	Performance Analysis of Terrestrial DVB-T In AWGN Channel Using OFDM And 128-QAM in 2K And 8K Mode	Completed
4	2014	Co-Supervisor	Implementation of Audio Profile over IEEE 802.15.4	Completed
5	2014	Co-Supervisor	Energy Efficient Routing and Coverage using Fire-Fly Algorithm in Wireless Sensor Networks	Completed

Convener/Coordinator

S.No	Seminar / Workshop / Conference Organised	Date	Duration
1	Convener, UGC Sponsored *National Seminar* on Wireless Communication & Networks	24th Mar-2012	Two Days
2	Coordinator for "Introduction to MATLAB", a short term course	23rd Jul to 3rd Aug-2006	Two weeks
3	Convener, TITIKSHA, Technical Festival of SMVDU	2008	Three days
4	Convener, TITIKSHA, Technical Festival of SMVDU	2009	Three days
5	Coordinator, short term course in 'MATLAB® Applications in Electronics, Electrical & Computers'	August 8-10, 2008	Three days
6	Coordinator, short term course in 'MATLAB® Applications in Electronics, Electrical & Computers'	December, 2010	One week

Resource Person outside SMVDU

S.No	Seminar / Workshop / Conference Organised	Date	Duration
1	Expert Lecture on "Role of ICTs for effective Weather Advisory Services" during Short Training Course on "SUSTAINING AGRICULTURAL AND LIVESTOCK PRODUCTIVITY IN THE SCENARIO OF CLIMATE CHANGE"	31st Aug -2017	one days
2	Resource person for Model Training Course on "Information and communication technology applications" held in SKUAST Jammu	7th Nov-2015	two days

Professional Affiliation:

S. No.	Designation	Organization
1	Member	IETE

Administrative related work

i)   Nodal Officer, SMVDU, National Academic Depository (NAD)
ii)   Faculty I/c for Semester Exams in the School of ECE.
iii) Warden Boys' Hostel, 2007- 2009.
iv)   Associate Dean of Students, Boys' Hostel 2009- 2011.
v)   I/c Telecom Section, SMVDU, 2009-2011
vi)   I/c Audio-Video Section , SMVDU, 2009-2011
vii) Technical Expert for Up gradation of Telecom Exchange at Katra, SMVD Shrine Board, 2010
viii) Member in Invitation Committee of SMVDU Convocation, year 2009 and 2011.
ix)   Member, Committee of Admission Brochure 2012 and 2013.
x)   Secretary, Student Merit cum Means Scholarship Scheme (SMMSS) Committee of SMVDU, 2008-2011
xi)   Member, Local Organising Committee for International Conference, ICMRM, Dec-2010.
xii) Member, B.Tech Admission Committee, 2010 and 2011
xiii) Coordinator, B.Tech Major projects, School of ECE 2010, 11 and 12.
xiv) Member, Organising Committee, INSPIRE at SMVDU 2010 & 2011
xv)   Member, Organising Committee, INSPIRE at Leh 2015.
xvi) Member, Audio-Video committee of IEEE International Conference on "Communication Systems and Network Technology" (CSNT-2011)