

Curriculum Vitae

Personal information

Name **Sakhawat Hussain, Ph.D.**
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Nationality Bangladeshi,
Date of birth 18 December 1982
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Work experience

Occupation or position held **Associate Professor** (31/10/2018- till to date)
Assistant Professor (31/12/2013-30/10/2018)
Lecturer (08/11/2009-30/12/2013)
Main activities and responsibilities Teaching and Research
Name and address of employer Department of Electrical and Electronic Engineering, University of Dhaka
Dhaka-1000, Bangladesh

Research experience Group III-Nitride material's structural and optical characterization
Key techniques used: **S/TEM, AFM, XRD, PL and EL**

Education and training

Title of qualification awarded, Year **Ph.D., 2014**
Principal subjects / occupational skills covered Physics (Optoelectronics)
Name and type of organisation providing education and training CNRS-CRHEA (Centre de Recherche sur l'Hétéro-Epitaxie et ses Applications)
University of Nice-Sophia Antipolis, France
Title of qualification awarded, Year **Master of Science, 2008**
Result First Class 4th Position
Principal subjects / occupational skills covered Applied Physics, Electronics and Communication Engineering
Name and type of organisation providing education and training University of Dhaka
Dhaka-1000, Bangladesh
Title of qualification awarded, Year **Bachelor of Science, 2007**
Result First Class 2nd Position (**Honoured with Science Dean's award**)
Principal subjects / occupational skills covered Applied Physics, Electronics and Communication Engineering
Name and type of organisation providing education and training University of Dhaka
Dhaka-1000, Bangladesh

List of Publications

1. **S. Hussain**, Md. T. Prodhan and Md. M. Rahman, "Simulation analysis to optimize the performance of homojunction $p-i-n$ $\text{In}_{0.7}\text{Ga}_{0.3}\text{N}$ solar cell, Semiconductor Physics, Quantum Electronics and Optoelectronics (SPQEO), Vol. 24 Issue 2, pp 192-199 (2021).
2. **S. Hussain**, Md. M. Rahman and Md. T. Prodhan, "Modeling of $\text{In}_{0.17}\text{Ga}_{0.83}\text{N}/\text{In}_x\text{Ga}_{1-x}\text{N}/\text{Al}_y\text{Ga}_{1-y}\text{N}$ light emitting diode structure on ScAlMgO_4 (0001) substrate for high intensity red emission, Semiconductor Physics, Quantum Electronics and Optoelectronics (SPQEO), Vol. 23, Issue 4, pp 408-414 (2020).
3. Sadiya Afrin Swarna, Salma Faria, **Sakhawat Hussain**, Anis Ahmed, "Novel Microstrip Patch Antenna with Modified Ground Plane for 5G Wideband Applications", Global Journal of Researchers in Engineering: F (GJRE: F), Vol. 19, Issue 1, pp 9-15, (2019).
4. Rakib Hasan, Mustakim Ahmed Rahat, **Sakhawat Hussain**, Anis Ahmed, "Resonance Characteristics Enhancement of Slot-loaded Microstrip Patch Antenna for GPS Application", Global Journal of Researchers in Engineering: F (GJRE: F), Vol. 18, Issue 1, pp 23-29, (2018).
5. **Sakhawat Hussain**, Tasnim Zerine and Md. Ashik Khan, "Design and Simulation to improve the structural efficiency of green light emission of $\text{GaN}/\text{InGaN}/\text{AlGaIn}$ light emitting diode", Frontiers of Optoelectronics (2017), 10(4) :370-377
6. M.A. R. Ohi, M.S. Sadique, **S. Hussain** and A. Ahmed "Design and Fabrication of Slot-Loaded Microstrip Patch Antenna at 2.45 GHz", International Journal of Advanced Research in Electrical, Electronics and Instrumentation Engineering (IJAREEIE), Vol. 6, Issue 3, (March 2017)
7. Kaddour Lekhal, **Sakhawat Hussain**, Philippe De Mierry, Philippe Vennéguès, Maud Nemoz, Jean-Michel Chauveau, Benjamin Damilano, "Optimized In composition and quantum well thickness for yellow-emitting $(\text{Ga},\text{In})\text{N}/\text{GaN}$ multiple quantum wells", Journal of Crystal Growth 434 (2016) 25–29
8. K. Lekhal, B. Damilano, H. T. Ngo, D. Rosales, P. De Mierry, **S. Hussain**, P. Vennéguès and B. Gil-Strain-compensated $(\text{Ga},\text{In})\text{N}/(\text{Al},\text{Ga})\text{N}/\text{GaN}$ multiple quantum wells for improved yellow/amber light emission', Applied Physics Letter **106**, 142101 (2015)
9. **Sakhawat Hussain**, Kaddour Lekhal, Hyonju Kim-Chauveau, Philippe Vennéguès, Philippe De Mierry and Benjamin Damilano, 'Capping green emitting $(\text{Ga},\text{In})\text{N}$ quantum wells with $(\text{Al},\text{Ga})\text{N}$: impact on structural and optical properties', Semiconductor Science and Technology 29 (2014), 035016.
10. Benjamin Damilano, Hyonju Kim-Chauveau, Eric Frayssinet, Julien Brault, **Sakhawat Hussain**, Kaddour Lekhal, Philippe Vennéguès, Philippe De Mierry and Jean Massies, 'Metal Organic Vapor Phase Epitaxy of Monolithic Two-Color Light-Emitting Diodes Using an InGaIn -Based Light Converter', Applied Physics Express 6 (2013), 092105
11. Ibrahim Azad, **Sakhawat Hussain** and Rezaul Karim Mozumder, "Performance evaluation of different structured c band microstrip line bandpass filter", International Journal of Electronics and Communication Engineering and Technology (IJECET), Vol. 3, Issue 2, (July- September 2012), 148-163.
12. **Sakhawat Hussain**, Imtiaz Ahmend and Shahida Rafique, "Performance analysis of OFDM techniques for different mobile wireless channels" Journal of Bangladesh Electronics Society, 9 (1-2) 2009; 105-113.

Conference paper / Proceedings

1. Benjamin Damilano, Kaddour Lekhal, Hyonju Kim-Chauveau, **Sakhawat Hussain**, Eric Frayssinet, Julien Brault, Sébastien Chenot, Philippe Vennéguès, Philippe De Mierry, and Jean Massies, '*Monolithic white light emitting diodes using a (Ga,In)N-based light Converter*', Proceedings of SPIE, Vol. 8986 89861G-1
2. Benjamin Damilano, Julien Brault, Eric Frayssinet, H.Kim-Chauveau, **Sakhawat Hussain**, Jean Massies, J.-Y. Duboz, Jean-Michel Lamy, R. Charash, Mahbub Akhter, B. Corbett, '*Combination of MOCVD and MBE growth techniques for green-yellow InGaN-based light emitting diodes and laser diodes*' ICMOVPE-XVI, at Busan Korea, May 2012.

References

1. Professor Philippe Vennéguès
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