CURRICULUM VITAE

Hasan Khaled Rouf

45 Daisy Bank Road, Manchester, M14 5QW, UK
hasan.rouf@postgrad.manchester.ac.uk, hasan_khaled@yahoo.com *Phone: (+44)07588683111*

Education:

2007 - 2010:	PhD Researcher, School of Electrical & Electronic Engineering, The University of Manchester, UK.
Research topic:	Development of novel implicit finite difference time domain (FDTD) schemes for frequency dispersive media.
2004 – 2006:	Master of Science, Graduate School of Global Information & Telecommunication Studies, Waseda University, Tokyo, Japan.
Result:	'A' grade (80%-100%, highest grade)
Research area:	Multihop High-Frequency (HF) Communication Systems.
1997-1998	M. Sc. in Applied Physics & Electronics, University of Dhaka, Bangladesh. [Result published in November, 2001]
Result:	First Class
1994-1997:	B.Sc. (Honours) in Applied Physics & Electronics, University of Dhaka, Bangladesh. [Result published in November, 1999]
Result:	First Class

Experience:

- June 18, 2003 – 22 April 2007: *Lecturer*, Department of Applied Physics & Electronics, Chittagong University (second largest University of the country), Bangladesh
- April 28, 2002 – June 17, 2003: *Lecturer*, Department of Computer Science & Engineering, University of Development Alternative, Dhanmondi R/A, Dhaka, Bangladesh.

Publications:

Journals/ Letters:

1. 3D Crank-Nicolson finite difference time domain method for dispersive media, Hasan Khaled Rouf, Fumie Costen and Salvador Garcia, IET Electron. Lett. Volume 45, Issue 19, p.961–962

2. On the solution of 3D frequency dependent Crank-Nicolson FDTD scheme, Hasan Khaled Rouf, Fumie Costen and Salvador Garcia, Journal of Electromagnetic Waves and Applications, Volume 23, Issue 16, p.2163-2175
3. A method to reduce the errors in frequency dependent ADI-FDTD method, Hasan Khaled Rouf, Fumie Costen and Salvador Garcia, IET Electron. Lett. (in progress)
4. *Planning for another publication on* "human body modelling and interaction of electromagnetic waves with it using frequency dispersive Crank Nicolson method " in March-April, 2010
5. An algorithm for routing in BLSR SONET network, Hasan Khaled Rouf, Hasan Mahmud and Shahida Rafique, Dhaka University Journal of Science, Vol. 54, No. 1, January 2006, ISSN 1022-2502
6. Towards the improvement of data rate through DMARP in FDDI network, Hasan Khaled Rouf, Shahida Rafique, et al., Dhaka University Journal of Science, Vol. 54, No. 1, January 2006, ISSN 1022-2502

Conferences:

1. Improving the accuracy of frequency dependent ADI-FDTD, Hasan Khaled Rouf, Fumie Costen and Salvador Garcia, IEEE AP-S International Symposium and USNC/ URSI Radio Science Meeting, 2010 (in progress)
2. A frequency dependent implicit FDTD scheme, Hasan Khaled Rouf, Fumie Costen and Salvador Garcia, IEEE AP-S International Symposium and USNC/ URSI Radio Science Meeting, 1-5 June, 2009, SC, USA
3. Overcoming CFL constraint of FDTD in frequency dependent environment, Hasan Khaled Rouf, Fumie Costen and Anthony Brown, Fifth International Conference of Applied Mathematics and Computing, Plovdiv, Bulgaria, August 12-18, 2008.
4. Frequency-dependent Crank Nicholson Finite Difference Time Domain (FDTD) method for Ultra Wide Band (UWB) systems, Hasan Khaled Rouf, Fumie Costen and Anthony Brown, 10th International PhD Workshop, Gliwice, Poland, 18-21 October 2008
5. Studies on Multihop High Frequency Communication Systems, Hasan Khaled Rouf and Shigeru Shimamoto, IEICE General Conference (BS-8-13), 24-27 March, 2006, Tokyo, Japan.
6. An algorithmic approach to realize the routing of a four-fibre Bi-directional Line Switching Ring (BLSR) SONET network; Hasan Khaled Rouf, Sharmin Parveen, Hasan Mahmud and Shahida Rafique; Bangladesh Electronics Society Conference, April, 2003.

Related Skills and Scores:

a. *Programming:* Fortran, MATLAB , OpenMP and (oriented with) MPI
b. *OS:* Linux/ Unix, Windows.
c. Hands-on experience of handling large-scale computations and using grid computing resources e.g. National Grid Service (NGS), UK.
d. *HF and antenna related simulators:* EZNEC, HFTA, YW, TLW, VOACAP.
e. *Application packages:* Latex, Beamer, MS-Word, MS-Excel, MS-PowerPoint
f. *IELTS:* 6.5 (overall); *TOEFL:* 253 (CBT)
g. *English:* Fluent; *Japanese:* Basic / Conversational

Training, workshops etc.:

- Parallel Programming Summer School, Manchester Computing, The University of Manchester; Topics covered: Fortran 90, High Performance Computing (HPC), OpenMP and MPI (August, 2007)
- Field-focused summer course on 'Post-war reconstruction of education sector of Okinawa and peace-education', Japan International Cooperation Agency (JICA), Okinawa, Japan (August 2005).
- Japanese Language Learning Course, (for 300+ hours), Japan International Cooperation Centre (JICE), Tokyo, Japan (May-August, 2004)

Scholarships:

- Overseas Research Studentship (ORS) Award and Scholarship from the School of Electrical & Electronic Engineering, The University of Manchester to study for PhD.
- Japanese Development Scheme (JDS) Fellowship to study Masters at Waseda University, Tokyo, Japan
- Government Merit Scholarships in recognition of results in B.Sc. (Honours) and M.Sc. examinations at Dhaka University, Bangladesh.

References:

- Dr. Fumie Costen, School of Electrical & Electronic Engineering, The University of Manchester, Manchester M60 1QD, UK.
- Professor Anthony Brown, School of Electrical & Electronic Engineering, The University of Manchester, Manchester M60 1QD, UK.
- Dr. Salvador G. Garcia, Department of Electromagnetism and Matter Physics, University of Granada, Granada 18071, Spain