

**Sergey E. Mikhailov, Brunel University, UK,
and Tsegaye Gedif Ayele, Addis Ababa University, Ethiopia**

Dr Ayele visited Brunel University 20 May–13 September 2007 to begin exploring common research interests with the mentor. The mentor then visited Addis Ababa University 7-13 September 2007, when he was advised about the teaching and research in the Department of Mathematics. He gave a survey talk entitled "An Introduction to localised Boundary-Domain Integral and Integro-Differential Equations", and a short advanced level lecture course on "Sobolev spaces and localised boundary-domain integral equation analysis" to Dr Ayele's research group.

Dr Ayele and Mr Adane visited Brunel University from 8 June-6 July 2008, benefiting from library and other research facilities at Brunel, and continued to work on joint papers with Mikhailov. Mikhailov also advised Mr Adane on his PhD project. During the visit, a joint presentation was produced for the 10th International Conference on Integral Methods in Science and Engineering at Santander, Spain, which both Ayele and the mentor attended. In addition to these activities Dr Ayele gave a presentation in the "Workshop and School on PDE Analysis on Singular Spaces" at the University of Bonn, 11-15 February 2008.

This has been a very fruitful collaboration producing five publications to date.

Research Papers include:

[1] T.G.Ayele and S.E.Mikhailov, Analysis of some two-operator boundarydomain integral equations for a variable-coefficient BVP. In: *Integral Methods in Science and Engineering: Techniques and Applications*, Editors C.Constanda and M.E.Perez, Birkhäuser (in press).

[2] T.G.Ayele and W.T.Bitew, Partial Hypoellipticity of Differential Operators. In: *Further Progress in Analysis. Proceedings of the 6th International ISAAC Congress*, Editors H.G.W Begehr, A.O. Celebi and R.P. Gilbert. World Scientific, 2009. pp 611-621.

[3] T.G.Ayele and A.N.Abebe, Iterated Norms in Nikolskii-Besov type spaces with generalized smoothness, *Proceedings of the 7th International ISAAC Congress*, submitted for publication.

[4] Y.Adane and S.E.Mikhailov, Analysis of boundary-domain integral equations for a mixed boundary value problem with matrix coefficients,(in preparation).