

## MÖSSBAUER SPECTROSCOPY STUDIES OF IRON-FILLED CARBON NANOTUBES

**Steve Hudziak, Mark Baxendale**

Department of Physics  
Queen Mary, University of London,  
Mile End Rd.,  
London, E1 4NS, UK.  
[s.hudziak@qmul.ac.uk](mailto:s.hudziak@qmul.ac.uk)

Iron-filled single- and multi-walled carbon nanotubes were synthesized by high temperature heat treatment of FeCl<sub>3</sub>-impregnated single walled nanotubes [1] and pyrolysis of a ferrocene:C-60 mixture [2] respectively. Mössbauer spectroscopy measurements are used to probe the quality of the iron encapsulated inside to better understand the properties for magnetic composites, MFM tips and other future device applications.

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### References

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2. Grobert, N., et al., *Enhanced magnetic coercivities in Fe nanowires*. App. Phys. Letts., 1999. **75**(21).