

DR. IOANNIS K. KAPAGERIDIS

MSc PhD CEng CSci MIMMM

PERSONAL DATA

- *Date and place of birth:* 7th July 1972, Thessaloniki, Greece
 - *Father's first name:* Konstantinos
 - *Marital Status:* Married
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EDUCATION

- | | |
|-----------------------|---|
| Feb. 1992 – Sep. 1995 | Technological Educational Institute of W. Macedonia
<i>Mining Technology</i> <ul style="list-style-type: none">▪ Mining Technology Engineer
Grade 7.8/10
Final Year Project '<i>Computer Aided Deposit Modelling</i>' |
| Mar. 1994 – Jun. 1994 | Doncaster College, United Kingdom
<i>Erasmus Student Exchange Programme</i> <ul style="list-style-type: none">▪ Mining Engineering
With scholarship from the State Scholarships Foundation of Greece |
| Oct. 1995 – Sep. 1996 | University of Nottingham, United Kingdom
<i>Mineral Resources Engineering & Management</i> <ul style="list-style-type: none">▪ Master of Science in Mineral Resources Engineering & Management
Acknowledged by DIKATSA, act 15/75 as equivalent to MSc degrees awarded by Hellenic Universities |
| Oct. 1996 – Sep. 1999 | University of Nottingham, United Kingdom
<i>Mineral Resources Engineering</i> <ul style="list-style-type: none">▪ Doctor of Philosophy in Mineral Resources Engineering:
<i>Application of Artificial Neural Network Systems to Grade Estimation from Exploration Data</i>
With scholarship from the State Scholarships Foundation of Greece
Acknowledged by DIKATSA, act 15/76 as equivalent to PhD degrees awarded by Hellenic Universities |
| Nov. 2002 – Oct. 2003 | Technological Educational Institute of W. Macedonia
<i>Economical Geology - Mineralogy</i> <ul style="list-style-type: none">▪ Post Doctorate:
<i>Investigation of Dimensionality Effects to the Performance of Artificial Neural Networks in Grade Estimation from Exploration Data</i>
With scholarship from the State Scholarships Foundation of Greece |

MAIN PROFESSIONAL EXPERIENCE

11/5/1998 – 18/2/2000 Maptek/KRJA Systems Ltd.

Mining Engineer – Technical Services

Mining engineer in technical support and customer training for the VULCAN 3D Software and Chronos. Software demonstrations to mining companies and educational institutes. Resource/reserve estimation studies using VULCAN for company clients. Software quality assurance.

Clients training: engineers and geologists from the following companies:

- Anglo-American Plc (Lisheen mine in Ireland)
- UK Coal (Great Britain)
- Celtic Energy (Great Britain)
- Carmeuse (Belgium)
- CiRN (Spain)

Studies: reserves estimation, pit design and scheduling for the following companies:

- Anglo-American Plc (Lisheen mine in Ireland)
- Carmeuse (Belgium)
- OCP (Morocco)
- RMC Aggregates (Great Britain)

Other activities: Maptek booth organisation and support during Mining 98 exhibition in London. Organisation of the VULCAN 3D Software Users Conference in Nice, France. Conference proceedings publication: 2nd VULCAN Regional Conference.

9/2000 – 8/2001

Technological Educational Institute of W. Macedonia

Department of Geotechnology and Environment – Research Associate

Theory and lab lectures in Computer Applications in Geotechnical and Mining Projects.

9/2001 – 8/2002

Technological Educational Institute of W. Macedonia

Department of Geotechnology and Environment – Research Associate

Lecturing of theory and labs in Computer Applications in Geotechnical and Mining Projects. Lecturing of theory in Geostatistics. Supervision of Mr. I. Tavoularis final year project.

9/2002 – 8/2003

Technological Educational Institute of W. Macedonia

Department of Geotechnology and Environment – Research Associate

Lecturing of theory and labs in Computer Applications in Geotechnical and Mining Projects. Lecturing of theory in Geostatistics. Supervision of

8/4/2002 – 31/3/2003

Maptek/KRJA Systems Ltd.

Mining Engineer – Technical Services based in Kastoria

Mining engineer in technical support and customer training for the VULCAN 3D Software and Chronos. Software demonstrations to mining companies and educational institutes. Resource/reserve estimation studies using VULCAN for company clients. Software quality assurance.

Clients training: engineers and geologists from the following companies:

- ONA Managem Group (Morocco)
- Western Areas South Deep Mine (South Africa)
- Rotem Amfert Negev Ltd (Israel)

Studies: reserves estimation, pit design and scheduling for the following companies:

- Geohellas SA (Greece)
- TITAN AE (Greece)
- ONA Managem Group (Morocco)

Other Activities: training Maptek staff in VULCAN and Chronos in the Johannesburg office (S. Africa). Organisation and support of Maptek's booth at Electra Mining 2002 exhibition in S. Africa.

1/4/2003 – 30/9/2004

Maptek/KRJA Systems Ltd.

Mining Engineer – Technical Services based in Nottingham, UK

Mining engineer in technical support and customer training for the VULCAN 3D Software and Chronos. Software demonstrations to mining companies and educational institutes. Resource/reserve estimation studies using VULCAN for company clients. Software quality assurance.

Clients training: engineers and geologists from the following companies:

- Cleveland Potash Boulby Mine (G. Britain)
- Anglo-American Plc (Lisheen mine - Ireland)
- UK Coal (G. Britain)

Studies: reserves estimation, pit design and scheduling for the following companies:

- QGX Gold Ltd. (Mongolia)
- Barrick Gold Russia (Russia)
- Cleveland Potash Boulby Mine (G. Britain)

Other Activities: training Maptek staff in the Denver office (USA). Writing training manuals for VULCAN in the following subjects: Scheduling Open Pit and Underground Mines, Introduction to VULCAN, Groundwater Modelling with MODFLOW, Geotechnics, Underground Mine Design and Reserving. Design and administration of local area network in the Nottingham office (G. Britain).

1/10/2004 – 9/01/2006 Technological Educational Institute of W. Macedonia
Department of Geotechnology and Environment – Research Associate
Lecturing of theory and labs in Computer Applications in Geotechnical and Mining Projects. Lecturing of theory in Geostatistics. Supervision of final year projects.

10/01/2006 – today Technological Educational Institute of W. Macedonia
Department of Geotechnology and Environment – Assistant Professor
Lecturing of theory and labs in Computer Applications in Geotechnical and Mining Projects. Lecturing of theory and labs in Geostatistics. Lecturing of theory and labs in Remote Sensing and Geographical Information Systems. Lecturing of theory and labs in Information Systems. Director of Mining Information Technology and GIS Applications Laboratory. Supervision of final year projects. Director of the Departments' Environmental and Information Systems Sector.

ADDITIONAL PROFESSIONAL EXPERIENCE - CONSULTANCY

3/1995 – 8/1995 Technological Educational Institute of W. Macedonia
Professional Practice – Environmental Physics Laboratory
Atmospheric pollution data acquisition, recording, storage and pre-processing.

10/1996 – 2/1997 University of Nottingham
Department of Mineral Resources Engineering
Tutorials in mine planning software in the first semester of the Master of Science course.

1/1998 – 3/1998 Cleanaway Limited - Wastewise
Department of Mineral Resources Engineering, University of Nottingham
Visual impact assessment study of a waste disposal site in Kent, United Kingdom on behalf of Cleanaway and Wastewise.

10/1998 – 2/1999 University of Nottingham
Department of Mineral Resources Engineering
Lecturing Artificial Neural Networks in the fifth semester of the Bachelor of Mining Engineering course.

27/3/2000 – 27/8/2001 Hellenic Army
Sergeant (Army) – Intelligence Officer
Military service - 18 months.

7/2000 Maptek/KRJA Systems Ltd.
ONA Managem Group, Morocco

	Geological modelling and reserve estimation for Managem on behalf of Maptek/KRJA Systems Ltd.
2/2001	Technological Educational Institute of W. Macedonia, Greece <i>Marmin 2001 Marble Exhibition</i> Organisation and support of the Department of Geotechnology and Environment booth.
2/2002	Technological Educational Institute of W. Macedonia, Greece <i>Marmin 2002 marble exhibition</i> Organisation and support of the Department of Geotechnology and Environment booth.
4/2001	TITAN CEMENT SA <i>USJE Mine, FYROM</i> Geological modelling, reserve estimation and mine modelling of a marl deposit in Skopje on behalf of TITAN. The study supported the decision making and the final purchase of the mine by TITAN.
4/2001	Maptek/KRJA Systems Ltd., UK <i>Geobellas S.A.</i> Geological modelling, reserve estimation and mine modelling of an Atapulgitite deposit using VULCAN for demonstration on behalf of Maptek/KRJA Systems Ltd.
7/2001	Geohellas S.A., Greece <i>Dump Design and Modelling</i> Design and volumetric calculation of a dump area using VULCAN.
19/11/2004 – 24/1/2005	Anatolia Minerals Development Corp., Turkey <i>Pit Design Optimisation & Scheduling Study of a Gold Deposit</i> Open pit design and optimisation, ore reserves estimation, NPV scheduling optimisation of the Copler deposit in Turkey.
9/2005	LAVA Mining and Quarrying SA, Greece <i>Visual Impact Assessment Study of Pozolane Quarry in Milos</i> 3D modelling of pozolane quarry in Milos island and visual impact assessment of the proposed quarry extension and restoration plan.
4/2006	GEOHELLAS SA, Greece <i>VULCAN Software Application Study</i> Drillhole database generation, stratigraphic modelling, open pit design, reserve estimation.
5/2006	Carmeuse SA, Belgium <i>VULCAN Software Training in Greece</i> Three day introductory training of a geologist and a mining engineer. Introduction to VULCAN, drillhole database generation, triangulation

	modelling and CAD.
10/2006	<p>Carmeuse SA, Belgium</p> <p><i>VULCAN Software Training in Belgium</i></p> <p>Three day training of a geologist and a mining engineer. Block modelling, reserves estimation, open pit design.</p>
11/2006	<p>Public Power Corporation SA, Greece</p> <p><i>VULCAN 3D Software Application Study in Drillhole Compositing</i></p> <p>Drillhole compositing case study using PPC data and VULCAN 3D Software in order to assess the capabilities of the system according to PPC standards.</p>
5/2007	<p>LARCO SA, Greece</p> <p><i>VULCAN 3D Software Application Study</i></p> <p>VULCAN 3D Software application study using LARCO data to assess the capabilities of the software in geological modelling, grade / reserves estimation, open pit optimisation and open pit design.</p>
5/2007-6/2007	<p>Public Power Corporation SA, Greece</p> <p><i>Re-estimation of Lignite Reserves in the Area of Western Macedonia</i></p> <p>Drillhole, topographical and technical data entry. Pit design based on technical and economical parameters. Reserves estimation of all PPC lignite deposits in Western Macedonia.</p>
1/10/2007-16/11/2007	<p>LARCO SA</p> <p><i>VULCAN 3D Software Training</i></p> <p>18 days of training in VULCAN 3D Software at LARCO's premises in Athens. 22 persons attended the training including geologists and engineers. The training topics were the following:</p> <ol style="list-style-type: none"> 1. Introduction to VULCAN 2. Drillhole Databases 3. Geological Modelling 4. Block Modelling – Grade / Resource Estimation 5. Pit Optimisation 6. Pit Design and Modelling 7. Road Design and Modelling 8. Geostatistics
6/2008	<p>Lapland Goldminers SA, Sweden</p> <p><i>Resource Estimation Review</i></p> <p>Reviewing of resource model and results from the Haveri gold mine project in Finland as Qualified Person according to NI 43-101.</p>

PUBLICATIONS

- Kapageridis I, Denby B. *Ore grade estimation with modular neural network systems – a case study*. In: Panagiotou G (ed) Information technology in the minerals industry (MineIT '97). AA Balkema, Rotterdam, 1998, CDROM Proceedings Paper Code: KI16.
- Kapageridis I, Denby B. *Neural Network Modeling of Ore Grade Spatial Distribution*. In: International Conference on Artificial Neural Networks 98 (ICANN 98). Springer-Verlag, 1998, pp. 209-214.
- Kapageridis I, Denby B., and Hunter G. *Integration of a Neural Ore Grade Estimation Tool in a 3D Resource Modeling Package*. In: Proceedings of the International Joint Conference on Neural Networks (IJCNN '99), International Neural Network Society, and the Neural Networks Council of IEEE, Washington D.C., 1999, CDROM Proceedings Paper Index #0014, Session: 10.9.
- Kapageridis I, Denby B, Schofield D, and Hunter G. *GEMNet II – A Neural Ore Grade Estimation System*. In: 29th International Symposium on the Application of Computers and Operations Research in the Minerals Industries (APCOM '99), Denver CO, 1999, pp. 591-598.
- Καπαγερίδης Ι, Denby B, Hunter G. *Grade Estimation Using Artificial Neural Networks*. Mineral Wealth, Jul.- Sep. 99, 112, pp. 29-36, Scientific Company of Mineral Wealth Technologists, Athens, 1999.
- Kapageridis I, Denby B. *Ore Grade Estimation Using Artificial Neural Networks*. In: 2nd Regional VULCAN Conference, Maptek/KRJA Systems Ltd, Nice, 1999.
- Kapageridis I, Denby B. *GEMNet II – An Alternative Method for Grade Estimation*. In: 9th International Symposium on Mine Planning and Equipment Selection (MPES 2000), National Technical University of Athens, 2000, pp. 209-216.
- Kapageridis I. *I-SiTE – Laser Scanning Revolutionises Site Survey*. In: 9th International Symposium on Mine Planning and Equipment Selection (MPES 2000), National Technical University of Athens, 2000, pp. 715-719.
- Neilson I, Kapageridis I. *Environmental Management with VULCAN*. In: 8th International Conference on Development and Application of Computer Techniques to Environmental Studies (ENVIROSOFT 2000), Wessex Institute of Technology, Bilbao 2000, pp. 461-470.
- Kapageridis I, Triantafyllou A. *Use of Integrated Mining Software Package for the Training of Mining Technologists*. In: 17th International Mining Congress and Exhibition of Turkey (IMCET 2001), Chamber of Mining Engineers of Turkey, Ankara 2001, pp. 527-531.
- Kapageridis I. *Advanced 3D Software Systems for Effective Environmental Management*. In: International Workshop, New Frontiers in Reclamation: Facts and Procedures in Extractive Industry, Milos Conference Series: Restoring the Natural Balance, Milos 2001, pp. 93-98.
- Kapageridis I. *Artificial Neural Network Technology in Mining and Environmental Applications*. In: 11th International Symposium on Mine Planning and Equipment Selection (MPES 2002), VŠB - Technical University of Ostrava, Prague 2002.
- Kapageridis I. *Grade Interpolation Using Radial Basis Function Networks*. In: 11th International Symposium on Mine Planning and Equipment Selection (MPES 2002), VŠB - Technical

University of Ostrava, Prague 2002.

- Kapageridis I, Tavoularis I. *Mine Access Road Design and Modelling with IROAD*. In: 11th International Symposium on Mine Planning and Equipment Selection (MPES 2002), VŠB - Technical University of Ostrava, Prague 2002.
- Kapageridis I. *Optimized Open Pit Mine Planning and Scheduling*. In: 18th International Mining Congress and Exhibition of Turkey (IMCET 2003), Chamber of Mining Engineers of Turkey, Antalya 2003, pp. 331-338.
- Kapageridis I., Triantafyllou, A. *A Genetically Optimised Neural Network for Prediction of Maximum Hourly PM10 Concentration*. In: 12th International Conference on Modelling, Monitoring and Management of Air Pollution (Air Pollution 2004), Wessex Institute of Technology, Póδος 2004, pp. 161-170.
- Lee, D. and Kapageridis, I. *New Dimensions in Mining Software*. Materials Word, Institute of Materials, Minerals and Mining, September 2004.
- Kapageridis I. *Input Space Configuration Effects in Neural Network Based Grade Estimation*. Computers & Geosciences, Vol. 31, Issue 6, International Association for Mathematical Geology, Elsevier, pp. 704-717.
- Kapageridis I. *The Future of Mine Planning Software – New Tools and Innovations*. In: 19th International Mining Congress and Exhibition of Turkey (IMCET 2005), Chamber of Mining Engineers of Turkey, Izmir 2005.
- Kapageridis, I. *Mine Schedule Implementation Using a Multi-Agent Based System*. In: 18th Hellenic Conference on Operations Research, Hellenic Company for Operations Research, University of Western Macedonia, Kozani 2006.
- Kapageridis, I., and Chipras, D. *Visual Impact Assessment of Seaside Quarrying Operations and Planned Restoration*. In: 2nd International Conference on Advances in Mineral Resources Management and Environmental Geotechnology (AMIREG 2006), Technical University Crete, Chania.
- Exikis, A., and Kapageridis, I. *Simulation of Air and Contaminant Flow in Underground Mine Ventilation Networks*. In: 2nd International Conference on Advances in Mineral Resources Management and Environmental Geotechnology (AMIREG 2006), Technical University Crete, Chania.
- Argiantopoulou, M., and Kapageridis, I. *Multi-Agent Based Systems for Mine Planning and Simulation*. In: 2nd International Conference on Advances in Mineral Resources Management and Environmental Geotechnology (AMIREG 2006), Technical University Crete, Chania.
- Kapageridis, I. *Use of Tetrahedral Modelling for Variography and Grade Estimation of a Structurally Deformed Phosphate Deposit*. In: 11th International Congress for Mathematical Geology (IAMG'06 – Quantitative Geology from Multiple Sources), International Association for Mathematical Geology, Liege 2006.
- Kapageridis, I. *Introduction to Geostatistics*. ION Publications, Athens 2006, 238 pp.
- Pasiakos, G., Moutsika, D., Halari, A., and Kapageridis, I. *Design and Visualisation of Underground Workings Using Information from Multiple Sources*. In: 11th ACUUS Conference: Underground Space: Expanding the Frontiers, Associated Research Centers for Urban Underground Space, National Technical University of Athens, Athens, 2007.
- Kapageridis, I. *Implementation of Reporting Code Guidelines for Mineral Resources and Mineral Reserves Using a*

General Mine Planning Package. In: 3rd International Conference on Sustainable Development Indicators in the Minerals Industry, Milos, 2007.

Argyris, G., Kapageridis, I., Triantafyllou, A. *3D Terrain Modelling of the Amyntaio – Ptolemais Basin*. In: 2nd International Workshop in Geoenvironment and Geotechnics (GEOENV 2008), Milos island, Greece, 2008.

CONFERENCES PARTICIPATION

MineIT '97: Information technology in the minerals industry, National Technical University of Athens, 1997.

ICANN '98: International Conference on Artificial Neural Networks 98, European Neural Network Society, Skovde 1998.

IJCNN '99: International Joint Conference on Neural Networks, International Neural Network Society, and the Neural Networks Council of IEEE, Washington D.C., 1999.

APCOM '99: 29th International Symposium on the Application of Computers and Operations Research in the Minerals Industries, SME, Denver CO, 1999.

ENVIROSOFT 2000: 8th International Conference on Development and Application of Computer Techniques to Environmental Studies.

MPES 2000: 9th International Symposium on Mine Planning and Equipment Selection, National Technical University of Athens, 2000.

IMCET 2001: 17th International Mining Congress and Exhibition of Turkey, Chamber of Mining Engineers of Turkey, Ankara 2001.

REFAPRO 2001: International Workshop, New Frontiers in Reclamation: Facts & Procedures in Extractive Industry, Milos 2001.

MPES 2002: 11th International Symposium on Mine Planning and Equipment Selection, VŠB - Technical University of Ostrava, Prague 2002.

IMCET 2003: 18th International Mining Congress and Exhibition of Turkey, Chamber of Mining Engineers of Turkey, Antalya 2003.

AIR POLLUTION 2004: 12th International Conference on Modelling, Monitoring and Management of Air Pollution, Rhodes 2004.

IMCET 2005: 19th International Mining Congress and Exhibition of Turkey, Chamber of Mining Engineers of Turkey, Izmir 2005.

18th Hellenic Conference on Operations Research: Hellenic Company for Operations Research, June 2006, Kozani.

AMIREG 2006: 2nd International Conference on Advances in Mineral Resources Management and Environmental Geotechnology, Technical University Crete, September 2006, Chania.

IAMG 2006 – Quantitative Geology from Multiple Sources: 11th International Congress for Mathematical Geology, International Association for Mathematical Geology, September 2006, Liege.

SDIMI 2007 – 3rd International Conference on Sustainable Development Indicators in the Minerals

Industry, Milos island, Greece - 17-20/6/2007.

ACUUS 2007 - 11th ACUUS Conference "Underground Space: Expanding the Frontiers", Athens, Greece, 10-13/9/2007.

SEMINAR ATTAINMENT

Drilling Seminar, Institute of Geological and Mining Exploration, Kozani 1994.

Introduction to VULCAN 3D Software, Maptek/KRJA Systems Ltd, Nottingham 1997.

1st Regional VULCAN Conference, Maptek/KRJA Systems Ltd, Nottingham 1997.

2nd Regional VULCAN Conference, Maptek/KRJA Systems Ltd, Nice 1999.

Model Development with ILOG OPL-CPLEX and ODM Web Seminar, ILOG Inc., Paris, France, 2007.

The ILOG JRules 6 Technical Overview Presentation, Web Seminar, ILOG Inc., Paris, France, 2007.

Writing Better MIP Models, Web Seminar, ILOG Inc., Paris, France, 2007

ILOG CPLEX 11, Web Seminar, ILOG Inc., Paris, December 2007

ILOG CP Optimizer, Web Seminar, ILOG Inc., Paris, January 2008.

Publishing KML Services with ArcGIS Server 9.3, Live Training Seminar, ESRI, March 2008.

Learn how to build state-of-the-art decision support applications and models, Web Seminar, ILOG Inc., Paris, March 2008.

Introducing ILOG CP Optimizer 2.0, Web Seminar, ILOG Inc., Paris, May 2008

ILOG JViews: Go Beyond the Basic Eclipse User Interface, Web Seminar, ILOG Inc., Paris, May 2008

CROSS REFERENCES

Akcakoca, H., Eraslan, K., Celebi, N., and Pasamehmetoglou, A.G. *3D Modeling and Reserve Estimation of a Coal Deposit Using Neural Networks*, In: 9th International Symposium on Mine Planning and Equipment Selection (MPES 2000), National Technical University of Athens, 2000, pp. 773-776.

Koike K., Matsuda S., and Gu, B., *Evaluation of Interpolation Accuracy of Neural Kriging with Application to Temperature-Distribution Analysis*, *Mathematical Geology*, Volume 33, Issue 4, May 2001, pp. 421 – 448.

Zhang, Y.D., Zhang, R.X., Li, X.C., and Han, W.L., *AI-Based Comprehensive Optimization Technology for Mining Systems Analysis*, *Computer applications in the minerals industries: proceedings of the 29th International Symposium on Computer Applications in the Minerals Industries*, Beijing, China, 25-27 April 2001 / edited by Heping Xie *et al.*, 2001, pp. 197-202.

Samanta, B., Bandopadhyay, S., and Ganguli, R. *Data segmentation and genetic algorithms for sparse data division in Nome placer gold grade estimation using neural network and geostatistics*, Exploration and Mining Geology, October 2002, 11(1-4):69-76.

Cintra, E.C. *Aplicacao de redes neurais no controle de teores de cobre e ouro de deposito de Chapaga (GO)*, Tese de Doctorado, Instituto Geociencias e Ciencias Exactas, Universidad Estadual Paulista, Rio Claro, Spain, 2003. (PhD Thesis)

Fatima Abdul-Hamid, *Applications of Nuclear Techniques in Water Resources Management*, Technical Report KISR/NSTIC- 2005, National Scientific & Technical Information Center, Kuwait Institute for Scientific Research, 2005.

Ke, J. , Bandopadhyay, S., *Comparative Analysis Of Neural-Network And Traditional Meta-Modelings For Placer Gold Oregrade Spatial Variability Estimation*, 2003 SME Annual Meeting and Exhibit February 24 – 26, Cincinnati, OH.

CONFERENCE ORGANISATION COMMITTEES MEMBERSHIP

International Advisory Committee 17th International Mining Congress and Exhibition of Turkey, IMCET 2001, Chamber of Mining Engineers of Turkey, June 2001, Ankara

MEMBERSHIPS & SCIENTIFIC JOURNALS REVIEWER

Chartered Engineer Engineering Council, United Kingdom

Chartered Scientist Science Council, United Kingdom

Member European Neural Network Society

Professional Member Institute of Materials, Minerals and Mining, United Kingdom

Member International Association for Mathematical Geology

Member Scientific Company of Mineral Wealth Technologists, Greece

Associate Member Eclipse Foundation

Member Hellenic Company for Operations Research

Reviewer Mathematical Geosciences journal, Springer-Verlag

Reviewer Computers & Geosciences journal, Elsevier

FOREIGN LANGUAGES

- English: Excellent (Cambridge Proficiency)
 - German: Very Good (Goethe Institut Grundstufe)
 - Russian: Good (Language Centre, University of Nottingham)
-

COMPUTING SKILLS

- Operating systems: MS Windows, UNIX, Linux
- Programming: Basic, Pascal, Lisp, C/C++, Fortran, Perl
- Office applications: MS Office (Word, Excel, PowerPoint, Access, Project, FrontPage), Photoshop
- CAD software: AutoCAD, Maya, 3D Studio Max
- Mine Planning / Geological: VULCAN, Chronos, iGantt, Surfer
- GIS: ERDAS Imagine, MapInfo, ArcView, Raster Design