MIAMI UNIVERSITY

Dr. Yildirim Dilek Professor of Geology
Department of Geology Phone: (513) 529-2212
116 Shideler Hall Fax: (513) 529-1542
Oxford OH 45056 USA dileky@muohio.edu

Harrison Scholars Professor
U.S. Science Advisory Committee, USAC

17 March 2007

Dear Members of the GSA International Division Executive Committee:

It is with great pleasure that I nominate **Professor Alan Gilbert Smith** of the University of Cambridge (UK) for the Division's ***2007 Distinguished Career Award***. Professor Smith has been an elected Fellow of the Geological Society of America since 1961 (also a Fellow of the Geological Society of America since then) and is widely known for his quantitative regional structural and tectonic studies of the eastern Mediterranean region, Europe, North America, Southern Gondwana (Africa, India), and Antarctica. He has served on many international committees and commissions, such as the IUGS Commission of Structural Geology, Working Group of The International Commission of the Lithosphere, the International Association of Geodesy, and the Stratigraphic Commission of the Geological Society of London, playing a major role in organizing meetings and workshops, and streamlining the international database on related themes and disciplines. He also has helped the geology departments and surveys in developing countries (i.e. Albania, Pakistan) design and implement their research programs and initiatives related to the Tethyan geodynamics. He has touched the lives of many students during his 45 years of teaching at Cambridge, and some of his former Ph.D. students are among the most established faculty and researchers in Europe, North America, and Asia. His international accomplishments and service to the international science community are remarkable and distinguished. Therefore, I believe that Professor Smith is an excellent candidate to receive the GSA International Division Distinguished Career Award this year.

Alan Smith received his Ph.D. at Princeton University in 1963 and joined the Department of Geology and Geophysics in the University of Cambridge later in the same year. He worked with legendary Professor Ed Bullard on the continental rifting project, creating the very first continental margins maps and the palaeo-world atlas of the continents. This project subsequently led to the publication of a seminal paper on "the fit of the continents around the Atlantic" (*Philosophical Transactions of the Royal Society of London, 1965*) and then to the production of the "Phanerozoic Palaeocontinental World Maps" (*Cambridge University Press, 1981*) which collectively played a major role in the advancement of computer-aided global tectonic studies and continental reconstructions. Professor Smith is truly the pioneer of computerized plate tectonic animations and maps that most of us are using in our classrooms nowadays. His most widely cited paper and one of the all-time classics in geology was published in the GSA Bulletin in 1971, providing a first semi-quantitative approach to the regional tectonics of "the Alpine deformation and the oceanic areas of the Tethys, Mediterranean and Atlantic". His subsequent research

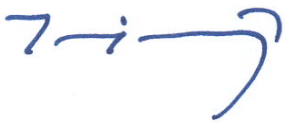
focused on the tectonics of the Balkan Peninsula (particularly Greece), and his research team has produced the most detailed geological maps and the quantitative structural and geochronological data from the Vourinos, Pindos, and Othris Mountains in the Western Hellenides during the 1980's and 90's that are still the best sources of information for that region. Through his quantitative and systematic regional tectonic studies and computerized continental reconstructions Professor Smith has made significant contributions to the plate tectonic revolution and to the global research initiatives around the world.

However, one of his most important and widely recognized contributions to the international science community is the production of a series of books on a geological time scale. He and his colleagues have published three books on a geological time scale (1982, 1990, and 2004) that have become a fundamental reference source in the earth sciences. These books present, discuss, and evaluate the state of chronostratigraphic, chronometric, and other scales, and include a revised calibration in years of the standard stratigraphic scale. The preparation of the data and information in these books was no doubt painstaking, tedious, and tremendously time-consuming, and Professor Smith was a major contributor to all three of these books. The updated geological time scale produced by Alan Smith and his colleagues (2004 version) has been widely used by the geologists, geochemists, geophysicists, and other earth scientists in the academia, industry, and national labs, and it is a significant contribution in the broad discipline of geosciences.

Alan Smith has received many distinguished awards in his career, notably the Sedgwick Prize of the University of Cambridge (1970) and the Moeity of Lyell Fund (1976) and the Bigsby Medal (1981) of the Geological Society of London (both of which are highly prestigious awards). A proper recognition of this remarkable scientist and his international service and accomplishments here in North America is long overdue, and therefore I would like the GSA International Division to consider him for the 2007 Distinguished Career Award. He is most deserving of this award, and our recognition and celebration of Professor Alan Smith's distinguished career will bring much visibility and spotlight to the International Division.

Thank you for your consideration.

Yours sincerely,



Yildirim Dilek
Past-President
GSA International Division

Curriculum vitae of Alan Gilbert Smith

Date of birth: 24 Feb 1937 Birthplace: Watford, England Marital status: married, one daughter

Home address: 27 Emery Street, Cambridge CB1 2AX, England.
Phone : Cambridge (01-223)-355-465

Work address: Department of Earth Sciences, Downing Street, Cambridge CB2 3EQ
Phone: (direct line and FAX): Cambridge (01-223)-333-439; e-mail: ags1@esc.cam.ac.uk

Education

Cambridge:

BA Physics; Awards: 1955: Minor Open Scholarship, St.John's; 1956, 1957: College prizes; 1959: Strathcona studentship.

Princeton:

1959-63: Ph.D. thesis on "The structure and stratigraphy of the Whitefish Range, Montana". Thesis advisers: J.C. Maxwell and F.B. Van Houten.

Awards: 1960: Charles Munn Fellowship; 1961: Procter Fellowship

Post-doctoral awards: 1970: Sedgwick Prize, University of Cambridge; 1976: Moeity of Lyell Fund, The Geological Society (London); 1981: Bigsby medal, The Geological Society (London).

Employment

Princeton:

1959: Summer field assistant, joint Princeton-Wisconsin crustal seismic program in Wisconsin, Montana and Wyoming
1959-60: Graduate research assistant to W.E.Bonini, writing two- dimensional gravity interpretation programs
1962-63: Part-time research associate: continuation of previous programming

Cambridge:

1963: Research assistant to E.C.Bullard and J.A.Miller, Department of Geodesy & Geophysics, setting up age-dating program for S American and African rocks and fitting continental edges together (with J.E.Everett)
1964-69: University Demonstrator, Department of Geology
1970-present: University Lecturer; Teaching Fellow, St. John's College

Teaching experience

1970-1996: Position as college lecturer requires 120 hours teaching per academic year in groups of 2-4; setting and marking essays, examples, progress reports,

references, etc.

1964-1990: Miscellaneous lectures, all with practicals:
First year: optics and mineralogy and petrology for geologists (12); surface processes (12); field courses in Arran (1 week)
Second year: sabbatical stand-in for structural geology (12) and for basin studies and geophysics (12); field courses in Dorset, Pembroke and SW England (generally a week)
Third year: Earth history (6) ; structural geology and tectonics (6); practicals for introductory paleontology

Current and recent (to 1996) lectures and practicals:

First year: Earth as a planet (10); practicals for the whole of the 1A except paleontology
Third year: Tethyan orogenic belts (4)
Field trips: Weymouth(1 week); Sedburgh (1 week in 1994); Skye (2 weeks in 1993); Greece (10 days)

Relatively recent overseas lectures

1992 & 1993 (on sabbatical in New Zealand, Lent Term) Lectures: Royal Society of New Zealand, Wellington (2); Research School of Earth Sciences, Wellington (2); Department of Geology, Otago (2); Department of Geology, Auckland (1); University of Texas Institute of Geophysics at Austin (1); Texas A & M (1); University of Delhi (1); University of Roorkie (1); National Oil and Gas Commission India (1), National Oil and Gas Development Corporation Pakistan (1), Sultan Qaboos University Oman (1)

1994: National University, Seoul, S Korea; German Geological Society, Heidelberg

1995: Tirana, Albania (2 lectures)

1995: Ocean Drilling Program, University of Bremen, Germany: (1 presentation, participant in workshop on improving the geological time-scale)

1996: co-organised Geological Society of London's meeting on 'Computers in stratigraphy' at the Applied Geosciences meeting in Warwick in 1996 (Presentation)

1996: Delft, Holland (open discussion on electronic distribution of geological information)

1996: Led field trip for AMOCO in Greece (5 days). Fees form donation to Department.

Future:

July/August 1996: Russian Academy of Sciences et al. Ekaterinburg, Russia (Presentation); other seminars in Mosocow

April 1997: To chair workshop on Computer-aided plate reconstructions in Pretoria, S Africa. Expect to lecture and/or give seminars at several South African universities prior to conference.

Professional activities

Societies:

1961-present: Geological Society of America (Fellow)
1961-present: The Geological Society (of London)
1969-present: American Geophysical Union
~1987-present: Petroleum Exploration Society of Great Britain
~1990-1996: Geological Information Group, Geological Society of London

Relatively recent editing:

1977-1994: editorial board Geology

Scientific committees:

To 1990:

1974-77: Member IUGS Commission of Structural Geology

1976: Chairman, Organising Committee for Inter-University Geological Congress (for UK undergraduates)

1977: Departmental representative, Earth Sciences Committee (to plan merger of three existing departments)

1977-78: Member active margin panel UK IPOD Committee (resigned 1978) Occasional co-opted member NERC Committees

1986-1990 Member of Working Group 2, International Commission of the Lithosphere

1987: Nominated as geology member of advisory panel for British Antarctic Survey (panel superseded by reorganisation)

1988: Member organising committee for 5th International Symposium on Antarctic Sciences, Cambridge, August 1987

1991-1996:

1990: Convenor European Geophysical Society's symposium on Paleozoic reconstruction of Europe

1990-1991: Petroleum Exploration Society of Great Britain's representative on joint committee with Geological Society of London for Geological Software. (Catalogue of nationally available software now published by Computer Teaching Initiatives, Leicester)

1991: Invited to membership of Scientific Committee for International Symposium on the Geology of the Black Sea region, Ankara. (Unable to accept owing to prior commitment)

1991: Invited to be Joint Co-Chairman and member of International Workshop on global sedimentary program project #2: Project Pangea, in Kansas. (Unable to accept owing to prior commitment).

~1992-1996: Member Special Study Group 5.145 of the International Association of Geodesy ‘Long-term variations in Earth rotation’.

1992-present: Stratigraphic Committee (now the ‘Stratigraphic Commission’),

1995: co-organizer of Geological Society of London's meeting on 'Computers in stratigraphy' (to be held in Warwick in 1996) with the British Sedimentology Research Group.

Academic evaluations, examinations, initiatives, etc:

1994: Invited to apply for the Yates-Goldsmith Chair of Geology, University College, London.

1995: Arranged for Petroleum Engineering, Polytechnic University, Tirana to be in contact with Imperial College for a European Union TEMPUS program on upgrading teaching and laboratory work in mining, and in oil and gas technology (worth > $0.25M)

1995-6: 4 Ph.D.s (topics include Crustal seismology, Joints in E Anglia, Geology of a Cycladic island)

1996: Invited to submit evidence for academic review of Dept. Geology, University of Otago, New Zealand

Occasional: Reviewer for NERC, NSF and equivalents in New Zealand and S Africa

Occasional: Assessor and referee for Professorships, Readerships and Senior Lectureships in UK and overseas

Computing:

Familiar with PCs. Have previously learned (and largely forgotten) BELL1, ASSEMBLER, TITAN autocode, FORTRAN and PASCAL; currently programming in C and trying to learn C++ and ObjectWindows.

Principal research

1964-present: calibrating the geological time-scale (with numerous other workers)

1965-76, with intermittent continuation: mapping and supervising research students mapping in Greece. (Supported by Shell Oil Company, The Royal Society and University of Cambridge). 10 Ph.D. students.

1971-present: developing methods, databases and programs for making reconstructions of the continents in past time (to 1985 with J.C.Briden, University of Leeds; B.M.Funnell, University of East Anglia) (Supported initially by NERC and later by BP). 4 research assistants in period.

1981-present: investigating past magnetic field (over periods of tens of millions of years), plate motions in various reference frames (with F.J.Vine, University of East Anglia). (Supported by NERC). 1 post-doctoral research assistant.

1990-present: analysing the evolution of Tethyan margins with N.J.White (4 Ph.D students).

Previous research students

I have supervised either jointly, but mostly wholly, more than 15 Ph.D. students in addition to those listed below. Most have worked in Greece (though one worked in Italy as well and others in Quebec and in Swaziland) and an M.Phil. (a former research assistant). Their work has largely been in regional geology and tectonics. All have entered academia, the oil industry or government surveys and are now scattered around the globe.

Current and recent research students

Gordon Coy (NERC student with J.A.Dickson)--will examine the carbonate platforms of Oman for their dolomitisation and diagenetic evolution, and estimate paleowater depth variations with time. (Expects to submit 1997).

Neil O'Leary (NERC student with N.J.White)--is quantitifying the evolution of the carbonate margins of Turkey and neighbouring regions and associated igneous rocks, together with some basin in northern Russia (jointly with the Cambridge Arctic Shelf Programme). (Expects to submit 1996)

Carl Trowell (BP student with N.J.White)--has quantified the evolution of the passive continental margins of Oman, Arabian platform and neighbouring regions and associated igneous rocks (Awarded Ph.D. 1995)

Graham Cocksworth (NERC student with J.F. Harper)--applied and developed Prof. Harper's (Applied Maths, Wellington, New Zealand) plate dynamics program to Cenozoic plate motions (Awarded Ph.D. 1995)

David Waters (from New Zealand--St. John's College, Benefactors' studentship)--reinterpreted the geological and tectonic evolution of Epiros, NW Greece. (Awarded Ph.D. 1994)

Daniel Wooler (Shell student with N.J.White)--made first quantitative assessment of stretching on Tethyan passive margins, centred on the Dolomites using McKenzie's lithospheric stretching model; inferred the percent of melting, depth range of melting and compositions of mantle source rocks of basalts formed in the early stages of extension. (Awarded Ph.D. 1993)

Research grants, etc.

In recent years research has been funded by sales of software and contract work through CPSL (see above), consultancy and leading field trips for industry.

Consulting, etc.

Non-stipendiary director Cambridge Paleomap Services Limited; ad hoc consulting; leading field trips for industry to Greece (jointly with other members of the Department). In general, any fees from such work have been ploughed back into research.

University, College, Departmental and other activities

To 1990:

~1980-85: Fisher Building Committee, St. John's College (to oversee planning and construction of a conference/undergraduate activities complex)

~1985-1994: Plate Committee, St. John's College (keeping an eye on the college silver)

~1985-1994: Advisory Committee, St. John's College Innovation Centre (to discuss and advise on progress and development of a £10m centre similar to a Science Park)

~1986-1991: Council, St. John's College (executive body of college)

1988-1991: External examiner, Leicester

1991-1996:

~1970-1996: of Studies in Geology and College Lecturer, St. John's College Natural Sciences Committee, St. John's College

~1975-1996: Buildings Committee, St. John's College (to manage external building repairs and improvements)

~1980-1996: Director of Studies in Geology for Newnham and Peterhouse

~1986-1996: co-organiser Greek field trip for Part II (=final year) geologists

1989-1996: Convenor 1A (=first year) teaching committee

1989-1996: Faculty Appointments Committee

1992: Invited to become Syndic of O&C Schools Examination Board (declined owing to other commitments)

1993-1996: Faculty Board of Geology & Geography; Degree Committee

1993-1996: Department of Earth Sciences Advisory Committee

1995-96: St. John's College Council (one year only, as on sabbatical in Lent 1997)

1995-: Suggested setting up Departmental Computing Committee (appointed Chairman)

1996-: Suggested setting up Departmental Alumni Committee (appointed Chairman)

1996-:Natural Sciences Research Fellowships Committee, St John's College (previously undertaken by Council)

1996: Faculty Board's representative on special Appointments Committee of General Board for the Readership in Geophysics made available by Prof. McKenzie's election to a Royal Society Professorship

PUBLICATIONS OF

Alan G. Smith

NOTE: Publication list needs some corrections, but contains most publications. There may be one or two repetitions, and the ordering could be improved. Those publications I am particularly fond of, or other people like, are in bold font. I do not keep a record of meetings, conferences, etc., that I have attended nor of the abstracts I may have submitted.

Audley-Charles, M.G., Hurley, A.M. and Smith, A.G., 1981. Continental movements in the Mesozoic and Cenozoic. In: Wallace's line and plate tectonics, In: Wallace's line and plate tectonics.

Barnes, W.C. and Smith, A.G., 1971. Some markings associated with ripple marks from the Proterozoic of North America. Nature, **201**, 1018-1019.

Briden, J.C., Hurley, A.M. and Smith, A.G., 1981. Palaeomagnetism and Mesozoic-Cenozoic palaeocontinental maps. Journal of Geophysical Research, 86, 11631-11656.

Briden, J.C., Kent, D., V, Lapointe, P.L., Livermore, R.A., Roy, J.L., Seguin, M.K., Smith, A.G., Van Der Voo, R. and Watts, D.R., 1988. Palaeomagnetic constraints on the evolution of the Caledonian-Appalachian Orogen. Special Publication of the Geological Society of London, **38**, 35-48.

Briden, J.C., Smith, A.G. and Sallomy, J.T., 1970. The geomagnetic field in Permo-Triassic time. Geophysical Journal of the Royal Astronomical Society, **23**, 101-117.

Bullard, E., Everett, J.E. and Smith, A.G., 1965. The fit of the continents around the Atlantic. Philosophical Transactions of the Royal Society of London, A258, 41-51.

Cocksworth, G.R., Harper, J.F. and Smith, A.G., 1991. Plate driving forces and the Cenozoic era. EOS, Transactions American Geophysical Union, **72**, 445.

Cocksworth, G.R. and Smith, A.G., 1993. Neozoic global paleocoastline maps. Wissenschftliche Zeitschrift der Technischen Universitat Dresden, **42**, 55-56.

Craig, L.E., Smith, A.G. and Armstrong, R.L., 1989. Calibration of the geologic time scale: Cenozoic and Late Cretaceous glauconite and non glauconite dates compared. Geology, **17**, 830-832.

Drewry, G.E., Ramsay, A.T.S. and Smith, A.G., 1974. Climatically controlled sediments, the geomagnetic field and trade wind belts in Phanerozoic time. Journal of Geology, **82**, 531-553.

Drewry, G.E., Ramsay, A.T.S. and Smith, A.G., 1976. Climatically controlled sediments, the geomagnetic field and trade wind belts in Phanerozoic time: a reply. J. Geol. Chicago, v.84,p.374-375. Journal of Geology, **84**, 374-375.

Firstbrook, P.L., Funnell, B.M., Hurley, A.M. and Smith, A.G., 1979. Paleoceanic reconstructions 160-0 Ma. National Oceanic Coring Program, Contract C-482, National Science Foundation, 41.

Friend, P.F., Harland, W.B. and Smith, A.G., 1970. Reddening and fissuring associated with the Caledonian unconformity in northwest Arran. Proceedings of the Geologists Assocation, 81, 75-85.

Funnell, B.M. and Smith, A.G., 1968. The opening of the Atlantic Ocean. Nature, 219, 1328-1333.

Gass, I.G., Smith, A.G. and Vine, F.J., 1075. Origin and emplacement of ophiolites. Geodynamics today (a review of the Earth's dynamic processes). The Royal Society, 54-64.

Gradstein, F.M., Ogg, J.G. and Smith, A.G., 2004. A geologic time scale 2004. Cambridge University Press, Cambridge University Press, 589.

Greiling, R.O., Jensen, S. and Smith, A.G., 1999. Vendian-Cambrian subsidence of the passive margin of western Baltica - application of new stratigraphic data from the Scandinavian-Caledonian margin. Norsk Geologisk Tidsskrift, **79**, 133-144.

Greiling, R.O. and Smith, A.G., In press. The Dalradian of Scotland: missing link between the Vendian of northern and southern Scandinavia? Physics and Chemistry of the Earth.

Harland, W.B., Armstrong, R.L., Cox, A., V, Craig, L.E., Smith, A.G. and Smith, D.G., 1989. A geologic time-scale [reference card].

Harland, W.B., Armstrong, R.L., Cox, A.V., Craig, L.A., Smith, A.G. and Smith, D.G., 1990. A geologic time scale 1989. Cambridge University Press, Cambridge University Press, 263.

—, 1985. Shkala geologicheskogo vremeni (Russian translation of the time scale). Mir, Mir, 240.

Harland, W.B., Cox, A.V., Llewellyn, P.G., Pickton, C.A.G., Smith, A.G. and Walters, R., 1982. A geologic time scale. 1st ed. Cambridge University Press, Cambridge University Press, 131.

Harper, J.F., Hurley, A.M. and Smith, A.G., 1981. Plate driving forces at anomaly 23 time. Tectonophysics, **74**, 169-187.

Hurley, A.M. and Smith, A.G., 1981. Computer fitting of continents. Geodynamics Series, **2**, 5-11.

Hurley, A.M. and Smith, A.G., 1981. Continental movements in the Mesozoic and Cenozoic. In: Whitmore, T.C. (Ed), Wallace's Line and plate tectonics. Clarendon Press, Clarendon Press, 9-23.

Hynes, A.J., Nisbet, E.G., Smith, A.G., Welland, M.J.P. and Rex, D.C., 1972. Spreading and emplacement ages of some ophiolites in the Othris region (eastern central Greece). Zeitschrift Deutsche Geologische Ges., **123**, 455-468.

Johns, W.M., Smith, A.G., Barnes, W.C., Gilmour, E.H. and Page, W.D., 1963. Progress Report 5. Geologic investigations in the Kootenai-Flathead area, northwest Montana. Montana Bureau of Mines and Geology, Bulletin 36, 68.

Livermore, R.A. and Smith, A.G., 1984. Relative motions of Africa and Europe in vicinity of Turkey. In: Geology of the Taurus Belt, In: Geology of the Taurus Belt.

—, 1985. Some boundary conditions for the evolution of the Mediterranean region. In: Stanley, D.J. and Wezel, F.C. (Eds), Geological evolution of the Mediterranean basin: Raimondo Selli commemorative volume. Springer-Verlag, Springer-Verlag, 83-98.

Livermore, R.A., Smith, A.G. and Briden, J.C., 1985. Palaeomagnetism constraints on the distribution of continents in the late Silurian and early Devonian. Philosophical Transactions of the Royal Society of London, **309**, 29-56.

Livermore, R.A., Smith, A.G. and Vine, F.J., 1986. Late Palaeozoic to early Mesozoic evolution of Pangea. Nature, **322**, 162-165.

Livermore, R.A., Vine, F.J. and Smith, A.G., 1983. Plate motions and the geomagnetic field. 1: Quaternary and Late Tertiary. Geophysical Journal of the Royal Astronomical Society, 73, 153-171.

—, 1984. Plate motions and the geomagnetic field. II: Jurassic to Tertiary. Geophysical Journal of the Royal Astronomical Society, 79, 939-961.

Pickering, K.T. and Smith, A.G., 1995. Arcs and backarc basins in the Early Paleozoic Iapetus Ocean. The Island Arc, **4**, 1-67.

—, 1997. The Caledonides. In: van der Pluijm, B.A. and Marshak, S. (Eds), Earth structure - an introduction to structural geology and tectonics. WCB/McGraw-Hill, WCB/McGraw-Hill, 435-444.

—, 2001. Oceanic gateways as a critical factor in initiating pre-Mesozoic glaciations. AGU Fall Meeting, PP42B-0523. San Francisco.

Rassios, A. and Smith, A.G., 2000. Constraints on the formation and emplacement age of western Greek ophiolites (Vourinos, Pindos and Othris) inferred from deformation structures in peridotites. In: Dilek, Y., Moores, E.M., Elthon, D. and Nicolas, A. (Eds), Ophiolites and oceanic crust: new insights from field studies and ocean drilling program. Geological Society of America Special Paper. Geological Society of America, Geological Society of America, 473-483.

Rawson, P.F., Allen, P.M., Bevins, R.E., Brenchley, P.J., Cope, J.C.W., Evans, J.A., Gale, A.S., Gibbard, P.L., Gregory, F.J., Hesselbo, S.P., Marshall, J.E.A., Knox, R.W.O.B., Oates, M.J., Riley, N.J., Rushton, A.W.A., Smith, A.G., Trewin, N.H. and Zalasiewicz, J.A., In press. A guide to stratigrahical procedure. Journal of the Geological Society, London.

Rawson, P.F., Allen, P.M., Brenchley, P.J., Cope, J.C.W., Gale, A.S., Evans, J.A., Gibbard, P.L., Gregory, F.J., Hailwood, E.A., Hesselbo, S.P., Knox, R.W.O.B., Marshall, J.E.A., Oates, M., Riley, N.J., Smith, A.G., Trewin, N., . and Zalasiewicz, J.A., 2002. Stratigraphical Procedure, Geological Society Professional Handbook. The Geological Society, The Geological Society, 57.

Roddick, J.C., Cameron, W.E. and Smith, A.G., 1979. Permo-Triassic and Jurassis Ar-Ar ages from Greek ophiolites. Nature, **279**, 788-790.

Smith, A.G., 1964. Potassium-argon decay constants and age tables. Quarterly Journal of the Geological Society of London, **120S**, 129-141.

Smith, A.G. and Barnes, W.C., 1966. Correlation of and facies changes in the carbonaceous, calcareous and dolomitic formations of the Precambrian Belt-Purcell Supergroup. Geological Society of America Bulletin, **77**, 1399-1426.

Smith, A.G., 1968. The origin and deformation of some 'molar-tooth' structures in the Belt-Purcell Supergroup. Journal of Geology, **76**, 426-443.

Smith, A.G., 1971. Continental drift. In: Gass, I.G., Smith, P.J. and Wilson, R.C.L. (Eds), Understanding the Earth, Open University Set Book, Science Foundation Course. Open University Press, Open University Press.

Smith, A.G., 1971. Alpine deformation and the oceanic areas of the Tethys, Mediterranean and Atlantic. Bulletin of the Geological Society of America, 82, 2039-2070. (Citation classic).

—, 1972. Estimation of tectonic rotation poles from inactive structures. Geological Society of America Memoir, **132**, 23-33.

—, 1972. Pre-Mesozoic plate tectonics. Proceedings 24th International Geological Congress, section 3, 166-171. Montreal

—,1973. The so-called Tethyan ophiolites. In: Tarling, D.H. and Runcorn, S.K. (Eds), Implications of continental drift to the earth sciences, v.2, Academic Press, London.

977-986.

—, 1973. Size and shrinkage rate of the Tethys and related oceans during the past 200 million years. Proceedings of symposium on ophiolites in the Earth's crust, Moscow. [The Russians did not like this. Published many years later through the offices of Celal Sengor]

—, 1974. India's motion relative to Eurasia since Permian time. Journal of the Geological, Mining and Metallurgical Society of India, Golden Jubilee Volume, 45-52

—, 1975. La deriva dei continenti al calcolatoreLa riscoperta della terra, La riscoperta della terra. Edizioni scientifiche e techniche Mondadori, Edizioni scientifiche e techniche Mondadori, 205-220.

—, 1976. Storia della croste terrestre, Annuario della EST Enciclopedia. Scienze e Technica 75 Mondadori, 273-288.

—, 1976. Plate tectonics and orogeny: a review. Tectonophysics, **33**, 215-285.

—, 1979. Othris, Pindos and Vourinos ophiolites and the Pelagonian zone. In: Kallergis, G. (Ed), Proceedings of the Vi Colloquium on the geology of the Aegean region, Athens 1977. Institute of Geological and Mining Research, Institute of Geological and Mining Research, 1369-1374.

—, 1979. Paleogeographic maps. In: Fairbridge, R.W. and Jablonski, D. (Eds), The Encyclopedia of Paleontology, Encyclopedia of Earth Sciences Series. Dowden, Hutchinson & Ross, 558-570.

—, 1981. Phanerozoic equal-area maps. Geologisches Rundschau, **70**, 91-127.

—, 1981. Subduction and coeval thrust belts, with particular reference to North America. Special Publication of the Geological Society of London, 9, 111-124.

—, 1982. Late Cenozoic uplift of stable continents in a reference frame fixed to South America. Nature, **296**, 400-404.

—, 1990. Continental drift, morphological evidence. In: Structural geology and plate tectonics, In: Structural geology and plate tectonics.

—, 1992. Methods for improving the chronometric time-scale. In: Hailwood, E. (Ed), High resolution stratigraphy. To be added. Geological Society, London, Geological Society, London.

—, 1992. Plate tectonics and continental drift. In: Brown, M., Hawkesworth, C.J. and Wilson, R.C.L. (Eds), Understanding the Earth. Cambridge University Press, Cambridge University Press, 187-203.

—, 1993. The tectonic significance of the Hellenic-Dinaric ophiolites. In: Prichard, H.M., Alabaster, T., Harris, N.B.W. and Neary, C.R. (Eds), Magmatic processes and plate tectonics. Special Publication Geological Society of London. Geological Society, Geological Society, 213-243.

—, 1996. Some aspects of the Phanerozoic paleogeographic evolution of Europe. Zeitschrift Deutsche Geologische Ges., **147**, 147-168.

—, 1997. Estimates of the Earth's spin (geographic) axis relative to Gondwana from glacial sediments and paleomagnetism. Earth-Science Reviews, **42**, 161-170.

—, 1999. Gondwana: its shape, size and position from Cambrian to Triassic times. Journal of African Earth Sciences, 28, 71-97.

—, 2001. Paleomagnetically and tectonically based global maps for Vendian to mid-Ordovician time. In: Riding, R. and Zhuravlev, A.Y. (Eds), The ecology of the Cambrian radiation. Columbia University Press, Columbia University Press, 11-46.

—, 2006. Tethyan ophiolite emplacement, Africa to Europe motions, and Atlantic spreading. In: Robertson, A.H.F. and Mountrakis, D. (Eds), Tectonic development of the Eastern Mediterranean region. Special Publication. Geological Society of London, Geological Society of London, 11-34.

Smith, A.G., Briden, J.C. and Drewry, G.E., 1973. Phanerozoic world maps. In: Hughes, N.F. (Ed), Organisms and continents through time. Special paper. Palaeontological Association, Palaeontological Association, 1-42.

Smith, A.G. and Briden.JC, 1977. Mesozoic and Cenozoic paleocontinental maps. Cambridge University Press, Cambridge University Press, 63.

Smith, A.G. and Cocksworth, G.R., 1991. Neozoic (= Cenozoic and Mesozoic) global paleocoastline maps. Terra Abstracts, **3**, 278.

Smith, A.G. and Drewry, D.J., 1984. Delayed phase change due to hot asthenosphere causes Transantarctic uplift? Nature, **309**, 536-538.

Smith, A.G. and Hallam, A., 1970. The fit of the southern continents. Nature, 225, 139-144.

Smith, A.G. and Livermore, R.A., 1984. Relative motions of Africa and Europe in vicinity of Turkey. Proceedings of the 1st International Tauride Conference.1-10. Ankara, September 1983.

Smith, A.G. and Spray, J.G., 1985. A half-ridge transform model for the Hellenic-Dinaric ophiolites. In: Dixon, J.E. and Robertson, A.H.F. (Eds), The Geological evolution of the Eastern Mediterranean. Special Publication of Society of London, Geological Society of London, 629-644.

Smith, A.G., Hurley, A.M. and Briden, J.C., 1981. Phanerozoic palaeocontinental world maps. Cambridge University Press, Cambridge University Press, 102.

—, 1982. Palaokontinentale Weltkarten des Phanerozoikums. German ed (Translation of Phanerozoic paleocontinental world maps). Enke,.

As above, but believed to have been translated into Chinese

Smith, A.G., Hynes, A.J., Menzies, M., Nisbet, E.G., Price, I., Welland, M.J.P. and

Ferriere, J., 1975. The stratigraphy of the Othris mountains, eastern central Greece: a deformed Mesozoic continental margin sequence. Eclogae Geologicae Helvetiae, 68, 463-481.

Smith, A.G. and Livermore, R.A., 1991. Hotlines and Cenozoic volcanism in East Antarctica and eastern Australia. In: Geological evolution of Antarctica. Proceedings of the Fifth International Symposium on Antarctic Earth Sciences, held at Robinson College, Cambridge, 23-28 August 1987, Proceedings of the Fifth International Symposium on Antarctic Earth Sciences, held at Robinson College, Cambridge, 23-28 August 1987.

—, 1991. Pangea in Permian to Jurassic time. Tectonophysics, **187**, 135-179.

Smith, A.G. and Pickering, K.T., 2003. Oceanic gateways as a critical factor to initiate icehouse Earth. Geological Society of London, **160**, 337-340.

Smith, A.G. and Rassios, A., 2003. The evolution of ideas for the origin and emplacement of the western Hellenic ophiolites. In: Dilek, Y. and Newcomb, S. (Eds), Ophiolite concept and the evolution of geological thought. Geological Society of America Special Paper. Geological Society of America, Geological Society of America, 337-350.

Smith, A.G., Smith, D.G. and Funnell, B.M., 1994. Atlas of Mesozoic and Cenozoic coastlines. Cambridge University Press, Cambridge University Press, 112.

Smith, A.G. and Spray, J.G., 1984. A half-ridge transform model for the Hellenic-Dinaric ophiolites. In: Dixon, J.E. and Robertson, A.H.F. (Eds), The geological evolution of the Eastern Mediterranean. Special Publication Geological Society of London. Geological Society of London, Geological Society of London, 629-644.

Smith, A.G. and Woodcock, N.H., 1976. The earliest Mesozoic structures in the Othris region, eastern central Greece. Bulletin de la Societe Geologique de France, **7**, 245-251.

—, 1976. Emplacement model for some 'Tethyan' ophiolites. Geology, **4**, 653-656.

Smith, A.G. and Woodcock, N.H., 1982. Tectonic syntheses of the Alpine-Mediterranean region: a review. In: Berckhemer, H. and Hsu, K.J. (Eds), Alpine-Mediterranean geodynamics. Geodynamics Series. American Geophysical Union, American Geophysical Union, 15-38.

Smith, A.G., Woodcock, N.H. and Naylor, M.A., 1979. The structural evolution of a Mesozoic continental margin, Othris mountains, Greece. Journal of the Geological Society (London), 136, 589-603.

Vine, F.J. and Smith, A.G., 1981. Introduction. In: Vine, F.J. and Smith, A.G. (Eds), Extensional tectonics associated with convergent plate boundaries. Philosophical Transactions of the Royal Society series A. The Royal Society, 300, 219-222.

Wooler, D., Smith, A.G. and White, N., 1992. Measuring lithospheric stretching on Tethyan margins. Journal of the Geological Society (London), 149, 517-532.