

ISS Forum

The Newsletter of the International Joseph A. Schumpeter Society

Dear Member of the International Joseph A. Schumpeter Society,

at this time of the year we usually take a look back reflecting on the year gone by. But this turn of the year is not a normal event. Not only a decade or a century is coming to an end but a new millenium is on the rise. There are a lot of apocalyptic visions and technophobic feelings about the date as such. Take for example the potential failure of electronic systems to accommodate the change of the date. However, in this issue of the ISS Forum we will not join in the chorus on the millenium bug. We will not use New Year's Eve as the inspiration for New Year's resolutions, either. But a week later is the date we are actually referring to in this issue of the Forum. It is January 8 2000 marking the 50th anniversary of Joseph A. Schumpeter's passing away.

A Memorial of Joseph A. Schumpeter in the first part of the Forum tries to sketch an image on how Schumpeter was assessed by his contemporaries. The first part of the Forum also introduces a volume about the intellectual legacy of Joseph A. Schumpeter. This comprehensive collection tracks his scientific heritage from the 50's to the present. The ISS Forum is proud to announce that for members of the Society we have negotiated a considerable discount on the two-volume set. For details please see pages 5 and 6.

Furthermore this issue of the ISS Forum contains a bunch of important information you should not miss reading.

On the final pages you will find information about the upcoming **Schumpeter Conference 2000** in Manchester, **28 Jun – 1 Jul**, including registration forms and the call for papers, reminding you of the **deadline for submissions (31 Jan 2000)**. Further I want to draw your attention to the announcement of the 7th Schumpeter Prize Competition on page 18 and encourage you to submit your contribution.

As started in the first issue of the Forum, we continue the series on educational programs that might be interesting not only for younger members, but also for lecturers advising graduate or Ph.D. students. In particular, we introduce the Master's program at SPRU and the Young Scientists Summer Program at IIASA.

In addition, reports on various activities either initiated and frequented by members of the Society or on activities within the members' range of interest are included, such as the EMAEE meeting, a workshop on the history of evolutionary thought in economics as well as the workshop on self-organization, evolutionary economics and innovation.

A conference diary covering January 2000 to January 2001 provides information on upcoming events. A further section will keep you updated on the publication activities of the Society's members.

Finally, I wish you and your family all the best for the year 2000.

Yours Horst Hanusch

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Joseph Alois Schumpeter

A Memorial blending contemporary obituaries

In the following Memorial, we try to illustrate the way in which Joseph A. Schumpeter was seen by his contemporaries at the time of his death in January 1950. We want to provide a sketch rather than to compose a historical essay on the life and work of Schumpeter. We proceed by compiling quotations selected from various obituaries. While this selection does not claim to paint a complete picture of either his personality or his scientific achievements, it will, we hope, represent splashes of color on a canvas that will inspire us to keep the memory of Joseph A. Schumpeter.

Joseph A. Schumpeter, one of the three or four great economists of his generation ¹. he was much more than an economist as on his achievements in the economic field itself. .. He himself used to say that an economist who is not also a mathematician, a statistician, and most of all a historian is not properly qualified for his profession. He was all these and more besides: he had an encyclopaedic knowledge not only of the history of economic doctrines, which was one of his special fields, but also of the history of economic facts and institutions and of general political and social history. ² He had not received professional training in mathematics, and the manipulation of numbers and of algebra did not come to him easily; but he acquired a great mathematical knowledge and could follow and effectively expound what even among mathematical economists is regarded as complicated mathematical analysis.³ It should not be considered flippant to compare Schumpeter's relation to mathematical economics with a true balletomane's attitude toward the classical ballet. He was not an active practitioner of the high art himself – none of his writings contains even a single mathematical argument of any length; he was able, however, to appreciate its fine nuances, knew its history, was intimately familiar with its present state and vitally interested in its future. ⁴ He was not an expert statistical technician, but he had a profound un-

derstanding of the logic and limitations of statistical inference and kept abreast of new methods and statistical source materials. All his life he was deeply interested in the theory social relations and social philosophy and made important contributions to sociology and to social and political philosophy. In some of these fields he had his superiors. There are in economics more refined and versatile mathematical theorists, there are more resourceful statisticians, and economic historians who know more about certain periods and certain subjects than he did. But as a master of all branches of economics and as a universal scholar, Schumpeter held a unique position among contemporary economists. ⁵ He never was a beginner ... he entered the scientific arena as a master ⁶ What is more unprecedented, a 25 or 27 year old, touching the foundations of his science, or a 30 year old, writing the history of his science! ⁷

The strongest single impression with which one was left after having spent an hour with him in the classroom or at a scientific meeting, or even better on a leisurely walk ... was that of the astounding width of Schumpeter's intellectual horizon. He was equally at home in early Greek philosophy, English parliamentary history, Italian literature, and French romanesque architecture ⁸ But he always had the rare and priceless talent — Böhm-Bawerk called it a “gift of God,” adding that it could be a dangerous gift — of easy and

quick expression.⁹ He could read and absorb new ideas and facts with amazing speed, and he never found it difficult in writing or speaking to find the right word or phrase from a tremendous vocabulary in both German and English. In fact, he used the English language with a verve and pungency that few could equal.¹⁰

While most economists, including those in the first ranks of the profession, devote today much of their time and energy to the practical task of oiling the creaking wheels of our economic machine, strain their shoulder in helping to heave it out of the rut of whatever current crises it finds itself in, or at least join the circle of eager on-lookers supplying gratuitous advice from the sidelines, Schumpeter shied away from the practical attitude. By conviction, as well as temperament, he was a thinker rather than a doer.¹¹ [H]e had a great intellect.¹² [H]e was a scholar and an intellectual.¹³

If his refusal to be preoccupied with the so-called immediate practical problems to the day ... is to be taken as a sign of his retirement of the ivory tower, Schumpeter had lived in such retirement for at least the last fifteen years. But what an unusual ivory tower it was! Set up in the very middle of the intellectual traffic of our time, it was ever full of visitors. Everyone was invited to enter its wide-open doors, everyone, that is, who had an idea to discuss, be it in economics or sociology, in history or art. An undergraduate student with a low record but a hunch about a possible new solution of the duopoly problem would be ... welcome.¹⁴ Besides his unsurpassable scientific fertility he poured his intellectual wealth upon his friends, students and the whole university.¹⁵

Why is there no Schumpeter School? I have often asked myself the question and have heard it raised by others... It would be tempting to explain

this in terms of external circumstances... But I do not think it is the real explanation... Schumpeter's mind and work offers a better explanation for the fact that he did not found a school.¹⁶ Schumpeter's universality and open-mindedness and the complexity of his system made the crystallization of a Schumpeter school difficult.¹⁷ It was Schumpeter's particular concern with the science, with the process of knowledge itself. The intellectual adventure meant more to him than the ultimate discovery. To prepare the ground for new ideas, to watch and to protect their growth, gave, I suspect, more satisfaction to him than even the final harvest; he was wise enough ... to realize that in the fields of intellectual endeavor no harvest is final, all fruit is perishable and only as good as the new seed it might contain.¹⁸ But there was an unforgivable omission: his students never heard one word of Schumpeterian economics. They were left to discover that for themselves, and appreciated it all the more when they did.¹⁹

Schumpeter himself was conscious of all this. In his farewell address to his students in Bonn he said: "I have never tried to bring about a Schumpeter school. There is none and it ought not to exist ... Economics is not a philosophy but a science. Hence there should be no schools in our field ... Many people feel irritated by this attitude. For in Germany alone there are half a dozen economists who regard themselves as heads of such schools, as fighters for absolute light against absolute darkness. But there is no use combating that sort of thing. One should not fight what life is going to eliminate anyway. Unlike politics and business, immediate success should not matter in science

... I for my part accept the judgement of future generations"²⁰

continued from page 4

¹ was taken from *The New York Times*, January 9 1950.

^{2, 3, 5, 9, 10, 13, 16, 17, 20} were taken from G. Haberler (1950), Joseph Alois Schumpeter, *The Quarterly Journal of Economics* 64, pp 333-372.

^{4, 8, 11, 14, 18} were taken from W. Leontieff (1950), Joseph A. Schumpeter, *Econometrica* 16, pp. 103-110.

^{12, 19} were taken from A. Smithies (1950), Memorial : Joseph Alois Schumpeter, *The American Economic Review* 40, pp. 628-645.

^{6, 7, 15} were taken from A. Spiethoff (1949), Joseph Schumpeter in Memoriam, *Kyklos* 3, pp. 289-293.

*Horst Hanusch,
University of Augsburg*

Book Announcement

The Legacy of Joseph A. Schumpeter

Fifty years after Joseph A. Schumpeter passed away in early 1950 he is undisputedly seen as one of the greatest economists of the 20th century. Joseph A. Schumpeter and John M. Keynes made their scientific contributions at about the same time, the latter being recognized as the intellectual winner at least in the second and the third quarter of the century.

Since the 1980s, however, Schumpeterian ideas are on their way to gain importance similar to the Keynesian heritage. To date, a collection was lacking on the bookshelves keeping track of Schumpeterian ideas as they spread in economic theory and methodology, and even beyond the boundary of the discipline; a book compiling the intellectual legacy of Joseph A. Schumpeter.

This gap has now been splendidly filled with a two volume collection *The Legacy of Joseph A. Schumpeter*, edited by Horst Hanusch. This collec-

tion presents an overview of the widespread importance of Schumpeter's thought. Part I explores the reception granted to Schumpeter's ideas by his contemporaries. In Part II the impact of his scientific ideas from the 1950's to the 1970's. Part III covers the renaissance of Schumpeterian thought in the 1980s. Whilst the contributions on industrial economics consist of the neoclassical models, the studies of innovation economics using an evolutionary approach reveal further ramifications of Schumpeter's intellectual legacy. Part IV emphasizes the importance of Schumpeterian ideas on modern macroeconomic theories; the final part V highlights the influence of his thought various fields such as public finance, sociology, politics and history.

Please note the special offer for ISS members on page 6.

The Legacy of Joseph A. Schumpeter 20% off for members

Details on the book The Legacy of Joseph A. Schumpeter, H. Hanusch (ed.) November 1999 1040 pp
Two-volume set, Hardback, ISBN 1 85898 505 6, Intellectual Legacies in Modern Economics Series.

Special Offer Members of the International Joseph A. Schumpeter Society are eligible to 20% discount on the regular retail price of £225.00 . **Special price for members of the ISS is £180.00**; postage and packing extra.

Ordering information Pre-payment required – please send full credit card details or request a proforma invoice. Please fax your order to Laura Wyer, Edward Elgar Publishing, Glensanda House, Montpellier Parade, Cheltenham Glos GL50 1UA Fax: + 44 1242 262111; email Laura@e-elgar.co.uk

Offer ends 1 March 2000

Self-Organization, Evolutionary Economics and Innovation: Theory, Modeling and Policy

Workshop at the University of Queensland in Brisbane

From July 12–15, 1999, The University of Queensland in Brisbane hosted about 60 scholars participating in the international workshop on „Self-Organization, Evolutionary Economics and Innovation: Theory, Modeling and Policy,. This event was organized by the Research Group on „The Emergent Complexity and Organization in Economics,, lead by John Foster (Univ. of Queensland) together with J. Stanley Metcalfe (Univ. of Manchester). The basic idea of the workshop was to discuss a broad range of evolutionary approaches performed world-wide and to investigate further lines of development. Following an introductory talk by Stan Metcalfe “The Evolution and Development of Evolutionary Economics: Opening Remarks”, ten sessions were scheduled, each with one paper, one discussion paper, and discussion from the floor.

The sessions can be classified under four sub-headings: 1. institutions and policy in an evolutionary framework; 2. specific approaches toward heterogeneity, qualitative change and complexity; 3. the creation of novelty; and 4. foundations and problems of evolutionary development. We review each of these in turn.

1. Institutions and policy in an evolutionary framework. The role of institutions and their co-evolution with technology was presented by Dick Nelson (Columbia University, N.Y.) („The Co-Evolution of Technology and Institutions as the Driver of Economic Growth,,) and discussed by John Gowdy (Rensselaer Polytechnic University, Troy, N.Y.). Institutions define and develop social technologies – new modes of organizing work, new kinds of markets, new laws, new forms of collective action – which are considered necessary to implement and to develop

successfully technological advances. With a political focus, Kevin Bryant (DISR, Canberra, Aus.) asked „What insights can we draw from the workshop for those engaged in the formulation of policies to promote R & D and innovation?„ The answer to this question takes the national innovation system as an entity consisting of different political and economics actors and institutions, which together drive technological and economic progress.

2. Specific approaches toward heterogeneity, qualitative change and complexity. Conceptual issues in Evolutionary Economics are challenging because traditional tools are not well suited to take into account core elements of an evolutionary approach, such as heterogeneity, qualitative change, and complexity. The paper „Heterogeneity and Evolutionary Change: Conception, Findings and Unresolved Issues„ by Uwe Cantner and Horst Hanusch (Univ. of Augsburg, Germany) - discussed by John Nightingale (Univ. of New England, Armidale, Aus) - tackled the issues of the heterogeneity of agents, possible ways of measuring it, and the problem of aggregation from the micro (or meso) to the macro level. The paper by Pier Paolo Savioiti (INRA-SERD, Univ. P. Mendés, Grenoble) „Considerations About a Production System with Qualitative Change: A Comparison of a Replicator Dynamics Approach and of an Input-Output Approach„ - discussed by Esben S Andersen (Univ. of Aalborg, Denmark) - was concerned with the problem of qualitative change and raised the question of the way in which changes in the economic system due to qualitative change could be represented in economic models. Francisco Louçã (ISEG, Lisbon, Portugal) presented „Measuring Complexity: Puzzles and Tentative Solutions„, discussed by Steve Keen (Univ. of

Western Sydney, Aus.). This paper investigates methodological and analytical problems arising when attempting to identify complex structures in macroeconomic time series.

3. Creation of novelty. Investigations into the sources of novelty are the common feature of three papers. In his paper „Knowledge, Ignorance and the Evolution of Complex Systems„ (with comments by Kevin Bryant (DISR, Canberra, Aus.)), Peter M Allen (IERC, Cranfield, UK) investigates systems which are able to reveal adaptation and learning and which are concerned with agents exploring possible futures. The paper „From Evolution to Language and Learning„ by Bart Nooteboom (Groningen Univ. Netherlands) - discussed by Paolo Ramazzotti (Univ. of Macerata, Italy) - dealt with the combined processes of the selection and the creation of novelty. Nooteboom suggests turning to theories of knowledge, learning and language, leading to the consideration of the relation between exploration and exploitation. Pavel Pelikan (The Industrial Institute for Economic and Social Research, IUI, Stockholm, Sweden) in his paper „The Origins of Successful Economic Organizations: A Darwinian Explanation with Room for Self-Organizing„ (discussed by Bryan Morgan (Univ. of Southern Qld, Aus.)) refers to the problem of the origins of economic organizations. The answer considers the ways in which organizations arise from individual action, comparable organizations compete, and public policy can spur this process.

4. Foundations and Problems of evolutionary development. Certain methodological problems of the evolutionary approach were discussed in a final group of papers. Kurt Dopfer (Univ. of St Gallen, Switzerland) presented „History-Friendly Theories in Economics: Reconciling Universality and Context in Evolu-

tionary Analysis,, which was discussed by Jason Potts (Univ. of Queensland, Aus.). The objective of this paper was to highlight the fact that evolutionary theorizing has to deal with long-run economic change, and thus universal principles are needed to explain the historicity of such processes. In this respect, a major focus of the paper was to extend the analysis to the consideration of several evolutionary trajectories instead of a single one. Robert Delorme (CEPREMAP, Paris, France), presenting „Complexity and Evolutionary Theorising in Economics,, (with comments by Drew Wollin (Univ.of Queensland, Aus.)) offered a discussion on the role and the challenge of complexity for evolutionary theory. Based on several meanings of complexity, he argued that evolutionary theory may become more systemized while still retaining its commitment to an open-ended perception of economic life.

To give a summary of the workshop is quite obviously a difficult task, given the broad range of topics and issues covered. It nevertheless turned out that the interface between complexity and evolution is extremely interesting and provides a considerably high potential for further investigations into our understanding of economic processes. Besides this, it also turned out - at least for the author of this report - that the language, the notions and the conceptions used in evolutionary economics (1) require consolidation to promote a commonly accepted basic set of concepts, and (2) should make use of more economic terminology instead of relying on an unadjusted adoption of concepts in other sciences - e.g. biology, physics. Both aspects are relevant for future work and the organizers of the first 'Brisbane Club' are already thinking of having a second event in two years time.

Uwe Cantner, University of Augsburg

The EMAEE Meeting

The first European Meeting on Applied Evolutionary Economics (EMAEE) took place in Grenoble/France from June 7 - 9 1999. Originally intended as a small-scale workshop mainly to bring together Ph.D. students with an interest in the empirical application of evolutionary economics the event developed into a conference more than 100 participants from all over the world presenting about 70 papers.

The theme of the conference, "applied evolutionary economics", reflected the wish of the organizers to translate theoretical models in evolutionary economics into empirical studies. To this end, researchers were brought together to discuss and elaborate systematic methodologies to enhance the emerging empirical strands in evolu-

tionary economics. It became evident that new techniques and new data sources open up many opportunities of inquiry. Among these are time-series econometrics, mapping techniques of networks and innovation systems, product variety indicators, calibrated simulation, artificial economies and in-depth case studies.

The attendants had a common interest in analyzing technological development, industrial dynamics, innovation system development, networking and firm behavior as evolutionary processes. A number of topics stood out by a large number of contributions: determinants of firm growth in the light of product life-cycle, standardization and increasing returns, inter-firm collaboration from a competence perspective, and

new techniques to map innovation systems. Moreover, a number of new technology policy models were presented within an explicit evolutionary perspective, including environmental policy models.

The conference was organised by INRA-SERD (Paolo Saviotti, Koen Frenken) and CNRS-IEPE (Jean-Marie Martin, Dominique

Finon, Edmar Almeida) at the University of Grenoble. It is envisaged to publish a number of the papers presented at the meeting in a book and in a special issue of a journal. We hope that other conferences will continue the empirical program in evolutionary economics in the future.

*Koen Frenken, University of Utrecht and
Andreas Pyka, INRA-SERD*

History of Evolutionary Thought in Economics

**Workshop at the Max-Planck-Institut for Research into Economic Systems
Jena, August 26-28 1999**

This workshop was jointly organized by the Max Planck Institute for Research into Economic Systems in Jena and Prof. Jürgen Backhaus (University of Maastricht). In eleven papers the participants dealt with the history of evolutionary thought in economics in several sub-disciplines as well as in the work of single authors. In his opening lecture Jürgen Backhaus (Maastricht, discussant Alexander Ebner, Frankfurt) discussed a contribution to the economic history which identifies a gap between the time of John Stuart Mill and Alfred Marshall in which the problem of economic development was largely neglected. Backhaus argued that this is misleading since the German economist Gustav Schmoller working during this time delivered a complex evolutionary theory emphasizing institutional prerequisites for economic development. Antonio Calafati (Ancona, discussant Simon Duindam, Maastricht) noted a progressive differentiation in the concept of evolution during this century. In spite of considerable differences progress was made in the understanding of economic evolution. Given the present state of research Calafati identified as a main problem to structure the class of empirical issues which can be subsumed under the label

‘economic evolution’. Stéphane Ngo Mai (Valbonne, discussant Deborah Tappi, Ancona) and Kiichiro Yagi (Kyoto, discussant Carsten Schreiter, Marburg) explored evolutionary features in John Hobson’s work and in contributions from the Austrian school of economics respectively. Esben Sloth Andersen (Aalborg, discussant Uwe Cantner, Augsburg), looking at ‘railroadization’ as the standard example used by Schumpeter for analyzing economic development, combined Schumpeter’s analysis with an ecological analysis providing a new interpretation of the system-level dynamics generated by technological change. Analyzing Thorstein Veblen’s work Helge Peukert (Frankfurt, discussant Kurt Dopfer, St. Gallen) argued that the interpretation of Veblen as building a fundament for a research agenda in evolutionary economics is misleading. By using a deconstructivist methodology Veblen is rather close to postmodern thinking. In a contribution to the late evolutionary thought of F.A. Hayek Ulrich Witt (Jena, discussant Uta-Maria Niederle, Rostock) noted that Hayek never attempted to reconsider business cycle theory – which he had worked out within a general equilibrium framework earlier in his career – from the spontaneous

order, disequilibrium point of view – with one exception: his late LSE lecture 1981 (which is still unpublished in English). Witt took up and elaborated on that lecture by presenting a non-equilibrium model of economic activity building an analogy between production processes and traffic flows. In this perspective aggregate output fluctuations seem to be an inescapable characteristics of free markets. Dietmar Meyer (Budapest, discussant Gerhard Wegner, Bochum) looked for evolutionary elements in the works of Karl Marx by comparing his labor theory of value with the Darwinian approach in evolutionary biology. Staffan Hultén (Stockholm, discussant Bertin Martens, Brussels) reconstructed the history of path-dependence theory. He stressed the "past-dependence of path-dependence" which can be found in the literature and can be taken as an explanation for different concepts hiding behind the notion of path-dependence. Ursula Backhaus

(Maastricht, discussant Gabriele Brandt, Dortmund) identified evolutionary thought in health economics by analyzing the work of Adolph Wagner. The last paper was given by Hans Maks (Maastricht, discussant Nicole Pohl, Duisburg) who traced the development of apriorism towards bounded rationality from John Stuart Mill's and Carl Menger's writing to the work of modern Austrian and evolutionary economists.

Since evolutionary economics as a discipline is young and has (yet) no unifying paradigm the papers given on the history of this field were of considerable heterogeneity in scope and perspective. Taking this into account the participants of the workshop agreed that the use of the word 'evolution' alone – which is quite frequent – does not imply that a significant contribution to evolutionary thought in economics has indeed been made.

Klaus Rathe, MPI Jena, Germany

Conference Diary

Selected conferences from January 2000 to January 2001

January 2000

13-15 Jan, Amsterdam, The Netherlands

CeNDEF Workshop on Economic Dynamics in Amsterdam, The Netherlands from 13. Jan. 2000 to 15. Jan. 2000.

Information Faculteit der Economische Wetenschappen en Econometrie, Roetersstraat 11, Kamer E.603, 1018 WB Amsterdam, The Netherlands. E-mail: adam.ws200@free.uva.nl

February 2000

25-27 Feb, Graz, Austria

Fourth annual conference of the European Society for the History of Economic Thought to be held at the University of Graz, Austria "Is there progress in economics?"

Information ESHET 2000 Department of Economics, University of Graz, Resowi-Zentrum F4, A-8010 Graz, Austria.

Tel: 43 316 380 3444. Fax: 43 316 351314.

E-mail: ESHET2000@kfunigraz.ac.at

March 2000**15-21 Mar, Munich, Germany**

The International Atlantic Economic Society will be hosting its 49th conference in Munich, 15-20 March 2000, at Ludwig Maximilians Universitaet Muenchen.

Information International Atlantic Economic Society, 4949 West Pine Blvd., Second Floor, St. Louis, MO 63108-1431 U.S.A.

Tel: 1-314-454-0100 Fax 1-314-454-9109

http://www.iaes.org/conferences/future/munich_49/index.htm

23-26 Mar, Crystal City, VI, USA

Eastern Economic Association 26th Annual Meetings

Detailed **information** can be found on

http://www.iona.edu/academic/arts_sci/orgs/eea/conf2000/home.htm

24-25 Mar, Auburn, AL, USA

Austrian Scholars Conference 6 in Auburn, Alabama, USA from 24. Mar. 2000 to 25. Mar. 2000.

Information Patricia Barnett The Ludwig von Mises Institute, 518 W. Magnolia Avenue, Auburn, Alabama 36832-4528

Tel -1-334-321-2100 Fax: -1-334-321-2119

Email pat@mises.org

<http://www.mises.org/upcoming.asp>

25-26 Mar, Tokyo, Japan

4th Annual Meeting of the Japan Association for Evolutionary Economics (JAFEE 2000) in Tokyo, Japan from 25. Mar. 2000 to 26. Mar. 2000.

Information Dr. Akio Matsumoto, Secretariat of LOC, JAFEE 2000, Department of Economics, Chuo University, 742-1, Higashi-Nakano,

Hachioji, Tokyo, 192-0393 JAPAN

Tel: 81-426-74-3351 Fax: 81-426-74-3425

E-mail: evolution@tamacc.chuo-u.ac.jp

<http://www.econ.kyoto-u.ac.jp/>

~evoeco/eng/annual00.html

May 2000**4-6 May, Aix en Provence, France**

Workshop on "Economic Complexity" Workshop of the Society for Computational Economics Special Interest Group on Economic Dynamics. In memoriam Siegmur Stoeppler. In Aix en Provence, France from 4. May. 2000 to 6. May. 2000.

Information is given on <http://sceco.univ-aix.fr/cefi/aix2000.htm>

9-13 May, Odense, Denmark

The Second International Conference on Discrete Chaotic Dynamics in Nature and Society (DCDNS2) in Odense, Denmark from 9. May. 2000 to 13. May. 2000.

Information Prof. Gustav Kristensen, University of Southern Denmark, 5230 Odense M, Denmark

Tel: + 45 65 50 21 14; Fax: + 45 65 95 33 66

E-mail: guk@sam.sdu.dk

24-26 May, Vienna, Austria

Seventh Viennese Workshop on Optimal Control, Dynamic Games and Nonlinear Dynamics in Vienna, Austria from 24. May. 2000 to 26. May. 2000.

Information

E-mail: ws2000@pom.bwl.univie.ac.at

June 2000

28 June – 1 July, Manchester, UK

Change, Development and Transformation: Perspectives on the Innovation Process. The Eighth International J. A. Schumpeter Society Conference.

Detailed **information** can be on pages 18-20 of this issue of the ISS Forum or from Stan Metcalfe, The University of Manchester, Manchester M12 9 PL United Kingdom. E-mail: stan.metcalfe@man.ac.uk

July 2000

6-8 Jul, Manchester, U.K.

Growth and Business Cycles in Theory and Practice in Manchester, United Kingdom from 6. Jul. 2000 to 8. Jul. 2000.

Information Keith Blackburn, Director, Centre for Growth and Business Cycle Research, School of Economic Studies, University of Manchester, Dover Street, Manchester, M13 9PL or E-mail Marianne Sensier: marianne.sensier@man.ac.uk <http://www.ses.man.ac.uk/cgbcr/latest.htm>

6-8 Jul, Barcelona, Spain

Society for Computational Economics Sixth International Conference on Computing in Economics and Finance in Barcelona, Catalonia, Spain, July 6-8, 2000 Supported by the Departament d'Economia i Empresa Universitat Pompeu Fabra

Information CEF 2000, Departament d'Economia i Empresa, Universitat Pompeu Fabra, Ramon Trias Fargas, 25-27, 08005, Barcelona, Catalonia, Spain Fax: +34 93 542 17 46; Tel: +34 93 542 26 68

9-28 Jul, Irvine, CA, USA

Topics in Mathematical Models of Individual and Public Choice in Irvine, CA, USA from 9. Jul. 2000 to 28. Jul. 2000.

Information Institute for Mathematical Behavioral Sciences, Department of Cognitive Sciences, University of California, Irvine, Social Science Plaza A, Irvine, CA 92697-5100 Tel: +1 (949) 824-7271 Fax: +1 (949) 824-3733 whbatc@uci.edu

September 2000

7-10 Sep, Lausanne, Switzerland

27th Meeting of the European Association for Research In Industrial Economics in Lausanne, Switzerland from 7. Sep. 2000 to 10. Sep. 2000.

Information Elliot Romano, Tel: +41-21-692 3474; Fax: +41-21 692 3365 E-mail: Elliot.Romano@hec.unil.ch <http://www.hec.unil.ch/earie2k/index.htm>

18-20 Sep, Paris, France

International Conference on Computer Simulations and the Social Sciences will take place in Paris

The conference purpose, as in Cortona ICCS&SS I, is to convene academics and non-academics studying social phenomena with the help of computer simulations.

Information ERMES Université Panthéon Assas Paris II; 92, Rue d'Assas; 75270 Paris Cedex 06; Tel : 33 1 44 41 59 27; Fax : 33 1 40 51 81 30 E-mail : ermes@u-paris2.fr

22-24 Sep, Tuebingen, Germany

4th Annual Conference of the International Society for New Institutional Economics in Tuebin-

gen, Germany from 22. Sep. 2000 to 24. Sep. 2000.

Information available in due course at <http://www.isnie.org/ISNIE2000.htm>

October 2000

15-18 Oct, Charlston, SC, USA

50th International Atlantic Economic Society Conference in Charleston, SC, USA from 15. Oct. 2000 to 18. Oct. 2000.

Information E-mail: iaes@iaes.org
http://www.iaes.org/conferences/future/charleston_50/index.htm

January 2001

5-7 Jan, New Orleans, LA, USA

AEA annual meeting, in New Orleans, LA. USA.

Information
<http://www.vanderbilt.edu/AEA/anmt.htm>

MSc in Science and Technology Policy at SPRU in Brighton, UK

Aims This MSc programme is centrally concerned with the sources and determinants of scientific research and technological change, and the impact of innovation adoption on the economy, society and environment. The programme aims to equip students:

- ♦ to understand and analyse the causes and consequences of scientific and technological change.
- ♦ to draw upon the insights of social science disciplines and to integrate these insights with perceptions derived from scientific or technological expertise
- ♦ to apply the critical skills, methods and tools acquired to policy-making and implementation processes in their subsequent careers.

Student profile About 20 students join the programme each year. About one-third come from the United Kingdom, and two-thirds from a wide range of countries in Europe, North America, Asia, Latin America and Africa.

The majority are starting the MSc immediately after completing their first degree, or within a year or two of that. Over recent years, however, a

growing number have joined the programme after longer periods of employment.

Careers The programme's strong emphasis on rigorous academic analysis and the development of critical, multidisciplinary perspectives prepares graduates for careers where they are likely to:

- ♦ analyse policy initiatives in national, regional and international institutions concerned with scientific research or technological innovation
- ♦ assess the impact of policy, regulation, and legislative controls affecting innovation and technological change
- ♦ undertake consultancy work in implementing or evaluating science and technology policy
- ♦ contribute to the public understanding of policy issues concerned with science and technology
- ♦ pursue research and teaching concerned with scientific research, technological change and public policy.

Programme structure and assessment

In the first term five core courses introduce students to a range of analytical frameworks through which the causes and consequences of scientific

and technical change can be addressed. These courses are assessed by an unseen examination and an extended essay of approximately 5000 words.

In the second term students select two option courses in which they explore specific topics in greater detail by applying concepts covered in the Autumn. The second term also includes a course on research methods which helps to develop skills needed for the dissertation. Each of the option courses is assessed by an extended essay of approximately 5,000 words which is written during the Spring vacation.

The courses in the first two terms are delivered through lectures and seminars. These are complemented by:

- ♦ guidance in the development of communication skills
- ♦ role playing exercises
- ♦ training in group working

- ♦ guidance in the use of electronic information sources
- ♦ case study material

In the third term and over the summer students prepare a dissertation of approximately 20,000 words, submitted at the end of August. Great emphasis is placed on undertaking independent research for the dissertation. Sometimes there are opportunities to work on current problems proposed by policy-making bodies such as the UK Office of Science and Technology, the UK Department of Trade and Industry, and the Higher Education Funding Council for England.

Information Michele Saliman, SPRU University of Sussex at Brighton, Mantell Building, Falmer; Brighton, East Sussex BN1 9RF; United Kingdom, Tel: +44 (0)1273 686758, Fax: +44 (0)1273 685865 E-mail: M.O.Saliman@sussex.ac.uk

Summer Program at the IIASA

Young Scientists Summer Program in Laxenburg, Austria

IIASA, located near Vienna, offers summer research opportunities to advanced students whose interests correspond with IIASA's commitment to issues of sustainability and the human dimensions of global change and to methods for dealing with these complex issues. Most YSSP scholarships are fully funded by one of the National Member Organizations.

From the beginning of June to the end of August, participants in IIASA's Young Scientists Summer Program (YSSP) work within IIASA's research projects, where they are guided by senior scientists. The program provides a unique opportunity for participants to acquire international experience, enhance their own research skills and become part of a worldwide network of special-

ists with broad interdisciplinary and cross-cultural perspectives.

Young scholars not only develop and expand their research topics in the interdisciplinary setting of IIASA's research projects, but have the opportunity to present their research findings in a seminar attended by all of the students as well as IIASA staff. Through these talks and discussions, the participants also learn about other scientific areas and have the possibility to develop their own presentation skills.

In addition, a program of seminars and lectures by short-term visiting scholars and collaborators gives the students exposure to research being done on global problems within IIASA and at other research institutions around the world.

Since the beginning of the program in 1977, over 900 graduate students from 45 countries have benefited from their participation in IIASA's scientific work and enhanced their own perspectives and career opportunities.

Each student completes a paper or report on his/her research activity. These reports may be considered for inclusion in IIASA's Interim Report series. Aurelio Peccei and Vladimir S. Mikhailovich awards are given to those participants whose reports are considered superior and whose general participation in the program is judged to be of high quality. The awards provide an opportunity to return to IIASA for an additional three-month period of work and study.

IIASA's scientific resources include the research projects, numerous visitors from other research institutes around the world, an excellent research library and computer services.

Applicants from all over the world are welcome. Students from countries in which IIASA has a National Member Organization (NMO) as well as students from non-NMO countries (in the developed and developing world) are encouraged to apply for participation in the program.

All applications received at IIASA will be forwarded to the relevant project leaders for their consideration. The final choices will be made on the basis of the following criteria:

- ♦ Preference will be given to applicants who are second- or third-year pre-doctoral candidates.

- ♦ The applicant's interests should correspond with ongoing research at IIASA: (among others) Population; Economic Transitions and Integration; Social Security Reform; Dynamic Systems; Adaptive Dynamics Network; Risk, Modeling and Policy
- ♦ The applicant's academic accomplishments and publications in relevant areas of research will be important considerations.
- ♦ Attention will also be given to the applicant's letters of recommendation.
- ♦ Since English is the Institute's working language, an acceptable working level of written and spoken English is required. Candidates who are not native English speakers should provide an official document showing proficiency in English.

Nearly all of IIASA's National Member Organizations provide grants to enable young scientists from their countries to participate in the Program. Inquiries concerning financial support should be directed to the appropriate National Member Organization. However, IIASA itself is not in a position to provide financial support to YSSP participants.

Information can be requested by Ms. Margaret Traber, YSSP Coordinator, IIASA, A-2361 Laxenburg, Austria, Tel: +43 2236 807 448, Fax: +43 2236 71313, E-Mail: traber@iiasa.ac.at; or at <http://www.iiasa.ac.at>.

Publications

Recent Publications by Members of the ISS

ACS Z J (ed) (1999), Are small firms important? Their role and impact, Kluwer Academic Publishers.

ACS Z, B CARLSSON, C Karlsson (eds) (1999), Entrepreneurship, small and medium-sized enterprises, and the macroeconomy, Edward Elgar.

- ARCHIBUGI D, J Michie (eds) (1998), Trade, growth and technical change, Edward Elgar.
- AUDRETSCH D B, S KLEPPER (2000), Innovation, evolution of industry and economic growth, Edward Elgar, forthc. 2000.
- AUDRETSCH D B, R THURIK (eds) (1999), Innovation, industry evolution and employment, Edward Elgar.
- E Brouwer, KLEINKNECHT A, (1999), Innovative output, and a firm's propensity to patent. An exploration of CIS micro data, Research Policy, No. 28, pp. 615-624.
- E Brouwer, A KLEINKNECHT, (1999), Keynes-plus? Effective demand and changes in firm-level R&D: an empirical note, Cambridge Journal of Economics, Vol. 23, No. 3, pp. 385-391.
- E Brouwer, A KLEINKNECHT, H Budil-Nadvornikova (1999), Are urban agglomerations a better breeding place for product innovation? An analysis of new product announcements, Regional Studies, Vol. 33, No. 6, pp. 541-549.
- CANTNER U, H HANUSCH, S KLEPPER (eds) (1999), Economic Evolution, Learning, and Complexity, Special Issue of the Journal of Evolutionary Economics, Vol. 9, No. 1
- CANTNER U, J BERNARD (1999), French Regional Performance and Variety - A Non-Parametric Frontier Approach, in: Badillo P.Y., J.C. Paradi (eds.), La méthode DEA - analyse des performances, Hermes Science Publications, pp. 255-273.
- CANTNER U, H HANUSCH (1999), Revisiting the Schumpeter hypotheses: Firm size, market structure and technological regime, , in: Fase M., Kannings W., Walker D., Economics, welfare policy and the history of economic thought. Essays in honour of Arnold Heertje, Edward Elgar, 1999, pp. 104-126.
- CANTNER U, A Pyka (1998), Performance économique et technologique comparée des stratégies d'innovation: un modèle de simulation dynamique de concurrence monopolistique, in: BERNARD J., M. Catin (eds), Les Conditions Économiques du Changement Technologique, L'Harmattan, pp. 63-94.
- CANTNER, U, J BERNARD (1998), Retombées technologiques, effets de rattrapage et dynamique intra-sectorielle, , in: BERNARD J., M. Catin (eds), Les Conditions Économiques du Changement Technologique, L'Harmattan, pp. 95-116.
- CANTWELL J (ed) (1999), Foreign direct investment and technological change, Series No. 8, Two vol. set, Edward Elgar.
- DOSI G., R. NELSON, S. WINTER (eds), The nature and dynamics of organizational capabilities, Oxford Univ. Press, Jan. 2000
- DOSI G., D. J. TEECE, J. Chytry (eds), Technology, organization, and competitiveness. Perspectives on industrial and corporate change, Oxford Univ. Press, 1998
- FAGERBERG J, P Guerrieri, B Verspagen (eds) (1999), The economic challenge for Europe. Adapting to innovation based growth, Edward Elgar.
- Fase M M G, Kanning W, Walker D A (1999), Economics, welfare policy and the history of economic thought. Essays in honour of Arnold HEERTJE, Edward Elgar
- Gambardella A, F MALERBA (eds) (1999), The organisation of economic innovation in Europe, Edward Elgar.
- HANUSCH H (ed) (1999), The legacy of Joseph A. Schumpeter, two vol. set, Edward Elgar.
- HEERTJE A (ed) (1999), The makers of modern economics, Vol. IV, Edward Elgar.

KASPER W, M E STREIT (1999), Institutional economics. Social order and public policy, Edward Elgar.

HERRMANN-PILLATH C, Z Deng (eds) (1999), Chinese Social Sciences Year Book 1998, Chinese Social Sciences Press.

Mowery D C, R R NELSON (1999), Sources of industrial leadership. Studies of seven industries, Edward Elgar.

Mowery D C, N ROSENBERG (1999), Paths of innovation. Technological change in 20th-century America, Edward Elgar.

PAVITT, K. (1999), Technology, management and systems of innovation, Edward Elgar.

Stephan P, D B AUDRETSCH, (eds), (1999), The economics of science and innovation, 2 vol. set, Edward Elgar

The Eighth International Joseph A. Schumpeter Society Conference - Call for Papers

**Change, Development and Transformation:
Transdisciplinary Perspectives on the Innovation Process
Manchester June 28 – July 1 2000**

The broad theme of this conference is the exploration of economic and social dynamics in relation to processes of innovation. This theme is very firmly located in the Schumpeterian tradition in which an economic perspective is grounded in a wider awareness of the contributing roles of other disciplines. Since Schumpeter wrote his path-breaking Theory of Economic Development, the degree of specialization in the social sciences has increased many fold, new disciplines have emerged for the study of management and business, while, at the same time, the connecting links between these different disciplinary perspectives grow increasingly fewer. Certainly these trends do not facilitate the study of innovation nor do they help us provide wider conceptual understandings of an essential feature of capitalism; namely, its propensity to change, develop and transform itself from within.

The conference programme will include contributions from scholars in a range of disciplines including economics, sociology, geography, economic and social history, history of science and technology, management and business studies,

and others as appropriate. It will also encourage contributions which cover the conference themes from the point of view of developing economies as well as advanced economies. Finally, it will include contributions which cover the science technology and innovation policy aspects of the conference themes.

Themes Among the planned conference themes will be:

- ♦ Economic sociology of innovation processes
- ♦ Institutions and innovation processes
- ♦ Innovation and economic development
- ♦ The economic history of change, transformation and development
- ♦ Economic geography of innovation processes
- ♦ The management of innovation processes
- ♦ Policies for innovation
- ♦ Modeling of change processes.

This list is indicative not exhaustive.

The scientific committee of the congress would like to encourage you to submit papers devoted to theoretical, empirical and historical aspects as well as policy analysis.

Deadline Abstracts of at least half a page and max. two pages should be submitted before **January 31, 2000** to either address:

Prof. J. S. Metcalfe, The University of Manchester, ESRC Centre for Research on Innovation and Competition, Tom Lupton Suite, Oxford Road, UK-Manchester M13 9QH Tel: +44 161 275-7365/8, Fax: - 275-7361, e-mail: stan.metcalfe@man.ac.uk or sharon.hammond@man.ac.uk

Prof. Horst Hanusch, University of Augsburg, Dept. of Economics, Universitaetsstr. 16, D-86135 Augsburg, Tel: +49 821 598-4179, Fax: - 598-4229, e-mail: horst.hanusch@wiso.uni-augsburg.de

Selection of papers will be based on abstracts. Decisions will be made on a rolling basis with all persons notified by the end of February. All acceptances will be contingent on the participant's completing conference and hotel registration by April 1, 2000. (Please include fax and e-mail addresses with abstracts.) Papers which are accepted will be made available on the Conference websites, for the International Schumpeter Society and the ESRC Centre for Research on Innovation and Competition (CRIC).

Information on Registration can be found in the last part of this issue of the ISS-Forum. It is also available on the CRIC website at <http://les.man.ac.uk/cric/Schumpeter/default.htm>

7th ISS Schumpeter Prize Competition

The International Joseph Alois Schumpeter Society (ISS) is pleased to announce its seventh Schumpeter Prize Competition. The prize is awarded every two years in recognition of a recent scholarly contribution related to Schumpeter's work. It carries a cash award of 10,000 Euro endowed by the German economics and business weekly, *Wirtschaftswoche*.

Change, Development and Transformation has been designated by the managing board of the Society as the topic for the seventh competition.

The conditions are as follows:

- ♦ Entries must be postmarked no later than March 1, 2000.
- ♦ Works submitted must be either unpublished or published subsequent to June 1, 1998.
- ♦ Submissions may be of article or book length. There is no page or format specification.
- ♦ Submissions will be judged by a committee appointed in 1998 at the biennial meeting of the ISS.
- ♦ The winner will be announced and the award made at the congress of the Society in Manchester/UK from June 28 to July 1, 2000.

Submissions are to be sent as an original and four additional copies to the committee chairman:

Prof. Dr. Kurt Dopfer

Hochschule St.Gallen

General Guisanstr. 1a

9010 St. Gallen, Switzerland

Tel: 41 71 224 2577

Fax: 41 71 224 2575

e-mail: kurt.dopfer@unisg.ch

**8th Schumpeter Conference, University of Manchester
Conference Registration Form**

Please print in black ink. Fill in parts A B and C and enclose appropriate payment.

Part A

Title: Professor Dr Mr Mrs Ms PhD Student Other

First Name: _____ Given Names: _____

Address: _____

Telephone: _____ Fax: _____

Email: _____

Please tick appropriate box

- ♦ **ISS Members** - £100 before March 31st 2000
- ♦ Non Members - £150 before March 31st 2000
- ♦ **ISS Members** - £150 after April 1st 2000
- ♦ Non Members - £175 after April 1st 2000
- ♦ Accompanying person at any time £75.00
- ♦ PhD Student £75.00

Please register for the following events:

- Evening Reception on Wednesday 28th June; Whitworth Art Gallery, Univ. of Manchester
- Social Evening on Thursday 29th June; Capesthorpe Hall, Cheshire
- Conference Dinner on Friday 30th June; Whitworth Hall University of Manchester
- Please indicate if you require vegetarian meals

Part B

Accommodation

(*Rooms depend on advance payment)

Accommodation may be booked for three nights at:

- ♦ The Chancellor's Conference Centre @£50 per person per night
 - ♦ Dalton Ellis Hall of Residence @ £36 per person per night
- (details of both the above are on the University of Manchester's Web site)

Additional Accommodation

Please indicate if you require additional accommodation:

Tuesday 27th Yes/No Saturday 1st July Yes/No

Number of people.....

- ♦ I will make my own arrangements for accommodation
- (We strongly suggest that you book at your earliest opportunity. See the list of hotels below.)

Part C

Payment

Please send completed form, together with payment for registration and accommodation to:
 Sharon Hammond, University of Manchester, Tom Lupton Suite, Oxford Road, Manchester
 M13 9QH. Sharon.Hammond@man.ac.uk. Fax 01612757361

Conference fee £.....

Accommodation fee £.....

Total £.....

1. By Sterling cheque made out to The University of Manchester
2. By credit card – please complete the attached sheet

CREDIT/DEBIT CARD RECEIPT
 Please attach booking form

FOR INCOME OFFICE USE

CUSTOMER NOT PRESENT	R/N:
DEPARTMENT OF : CRIC, ESRC Centre for Research on Innovation & Competition.	
CONTACT NAME AND TEL NO: Sharon Hammond Tel . 275 7368.	
DESCRIPTION OF CONFERENCE: International J. A Schumpeter Conference	

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DEPOSITED BY (sign) DATE

Sharon Hammond, CRIC, University of Manchester,
 Tom Lupton Suite, Precinct Centre,
 Oxford Road, Manchester M13 9QH