

## ***LUIGI ORSENIGO: Research Profile***

Luigi Orsenigo obtained his Ph.D. at the Science Policy Research Unit, University of Sussex, Brighton, U.K., in 1989. He has been teaching at Bocconi University and at the University of Brescia and he is now Associate Professor at the Department of Economics, Bocconi University, Milano, since 1992.

He spent periods of research and teaching also at INRA-SERD, Université Pierre Mendes-France, Grenoble (June-September, 1997), Center for Economic Policy Research, Stanford University, (July-August 1996), International Institute for Applied Systems Analysis (IIASA), Laxenburg, Austria (June-July 1994), Merit, University of Limburg, Maastricht (April-May 1994), Santa Fe Institute, Santa Fe, NM. (June 1993).

He has been involved in advisory activities on issues related to industrial policies, science and technology policies and regional planning for various national and international institutions.

His main research fields are in the areas of the economics of innovation, industrial dynamics and evolutionary theory, both theoretically and empirically.

### ***List of most relevant publications***

#### **Books**

- *The Emergence of Biotechnology. Institutions and Markets in Industrial Innovation.*", Pinter Publishers, London, 1989.

#### **Journals**

- "Innovation, Diversity and Diffusion : A Self-Organisation Model", (with G. Silverberg e G. Dosi), *The Economic Journal*, Vol. 98, December 1988.

- "The evolution of strategy and structure of a state-owned company: the case of Agip Petroli (1960-1990)", (with G. Sapelli e P. Toninelli), *Business and Economic History*, 1992.

- "Technological Regimes and Firm Behaviour", (with F. Malerba), *Industrial and Corporate Change*, 1993.

- "Schumpeterian patterns of innovation", (with F. Malerba), *Cambridge Journal of Economics*, 1995.

- "Technological Regimes, Selection and Market Structures", (with G. Dosi, O. Marsili, R. Salvatore), *Small Business Economics*, 1995.

- "Schumpeterian patterns of innovation are technology-specific" (with F. Malerba), *Research Policy*, 1996

- "Choice and action" (with D. Lane, F. Malerba and R. Maxfield), *The Journal of Evolutionary Economics*, 1996.
- "The Dynamics and Evolution of Industries" (with F. Malerba), *Industrial and Corporate Change*, 1996.
- "Persistence and Heterogeneity of Innovative Activities, Sectoral Patterns of Innovation and International Technological Specialization" (with F. Malerba and P. Peretto), *The International Journal of Industrial Organization*, 1997.
- "Special Issue on Technological Regimes, Industrial Demography and the Evolution of Industrial Structures", *Industrial and Corporate Change*, edited by G. Dosi, F. Malerba and L. Orsenigo, 1997.
- "The Dynamics of Knowledge and the Evolution of an Industry Network, (with Fabio Pammolli, Andrea Bonaccorsi, Massimo Riccaboni and G. Turchetti), *Journal of Management and Governance*, 1998.
- "A History-Friendly Model of the Evolution of the Computer Industry", (with F. Malerba, R. Nelson and S. Winter), *Industrial and Corporate Change*, 1999.
- "Technological Entry, Exit and Survival" (with F. Malerba), *Research Policy*, 1999.
- "Technological regimes and Schumpeterian patterns of innovation" (with S. Breschi and F. Malerba), *The Economic Journal*, 2000, forthcoming

## Chapters

- "Industrial Structure and Technical Change", (with G. Dosi), in A. Heertje (ed.) *Technology, Innovation and Finance*, Oxford, Basil Blackwell, 1988; translations in Italian, French, German and Spanish.
- "Coordination and Transformation: An Overview of Structures, Behaviour and Change in Evolutionary Environments", (with G. Dosi), in G. Dosi, C. Freeman, R. Nelson, L. Soete and G. Silverberg (eds.) *Technical Change and Economic Theory.*, Frances Pinter, London, 1988.
- "Technological Regimes and Patterns of Innovation: A Theoretical and Empirical Investigation of the Italian Case", (with F. Malerba), in M. Perlman and A. Heertje (eds), *Evolving Technology and Market Structure*, Ann Arbor, Michigan University Press, 1990.
- "Microeconomic dynamics and macro regularities: an "evolutionary" approach to technological and institutional change", (with F. Coricelli e G. Dosi), in *Technology and Productivity. The Challenge for Economic Policy*, OECD, Parigi, 1991.
- "The dynamics of competition in a science-based technology: the case of biotechnology", in D. Foray and C. Freeman (eds.), *Technology and Competitiveness. The dynamics of created advantages*, London, Pinter Publishers, 1992.

- "Innovative learning and institutions in the process of development: on the microfoundations of growth regimes", (with F. Chiaromonte and G. Dosi), in R. Thompson (ed.), *Learning and Technological Change*, London, Macmillan, 1993.
- "Evolutionary Regimes and Industrial Dynamics" (with G. Dosi and F. Malerba), in L. Magnusson (ed.) *Evolutionary Approaches to Economics*, London, Kluwer, 1993.
- "Macrodynamics and Microfoundations: an Evolutionary Perspective", (with G. Dosi), in O. Grandstand (ed.), *Economics of Technology*, Amsterdam, North Holland, 1994.
- "The Pharmaceutical Industry and the Revolution in Molecular Biology: Exploring the Interactions Between Scientific, Institutional and Organizational Change" (with G. Pisano e R. Henderson), in *The Sources of Industrial Advantages*, edited by D. Mowery and R. Nelson, Cambridge, Cambridge University Press, 1998, forthcoming.
- "Technological Entry and Diversification in Europe, the USA and Japan: 1978-91, (con F. Malerba), in Gambardella A. Malerba F.(ed) *The organisation of innovative activities in Europe*, Cambridge, Cambridge University Press, 1999.
- The Determinants of Research Productivity in Pharmaceuticals and Biotechnology: Implications for Public Policies (with I. Cockburn, R. Henderson and G. Pisano), in D. Mowery (ed.), *The Competitive Renaissance of the US Industry*, Washington DC, The National Academy, forthcoming.
- "Organizational Innovation and Organization of Innovative Activities in a Global Economy: the impact on competitiveness and growth", in Rubenson, K. and Schuetze H. (eds.), "*Transition to the knowledge society*", University of British Columbia Press, 1999.