

# Prof Elio Santacesaria

## Education

- High School Industrial Chemistry Diplome, 1961, Technical Institute “Ettore Molinari”
- Chemistry Degree (5 years course), 1966 University of Pavia, Dissertation on “The determination of sulphur trioxide in oleum with potentiometric method” under the guidance of the Nobel Prize Giulio Natta



## Professional activities

- 1967-1968 Researcher at the SNAM Progetti (ENI Group)
- 1968-1970 Fellowship at the Polytechnic of Milano, Researches in the field of Hydrazine monopropellant.
- 1970-1986 Researcher of the National Council of Research, Researches on Propellants, Catalysis, Kinetics, Reactor design and simulation, Separation Science working in collaboration with Prof. Sergio Carrà
- 1986-today Full Professor of Industrial Chemistry at the University of Naples “FEDERICO II” Science Faculty
- 1980-1990 Founder and President of the Italian Group of Colloid and Interface Science of the Italian Chemical Society
- 1980-1985 Coordinator of the lines “Pigments, Zeolites, Surfactants” of the National Program of Research on “Fine Chemical I of CNR
- 1980-1986 1985-1990 Coordinator of the lines “Pigments, Zeolites, Surfactants” of the National Program of Research on “Fine Chemical II of CNR
- 1994-2008 Dean of the Industrial Chemistry Degree Course at the University of Naples
- 1999-2000 Organiser and Chairman of the XIII National Congress of Industrial Chemistry 20-23 June 1999
- 1999-2000 Member of the Scientific Council of the 5th World Surfactant Congress Florence May 29-June 2, 2000
- 1999-2000 Organiser and Chairman of the Third International Congress “Catalysis in Multiphase Reactors” CAMURE 3, Naples 29-31 May 2000
- 2000-2005 Expert Evaluator for the Marie Curie Fellowships
- 1992-2001 Member of the Directive Council of Industrial Chemistry Division of the Italian Chemical Society
- 2001-2003 Vice-President of the Industrial Chemistry Division of the Italian Chemical Society

- 2004-2009 President of the Industrial Chemistry Division of the Italian Chemical Society
- 2004-today Co-Chairman of the Annual Meetings of the joint Meetings DGMK-SCI and co-Editor of the Proceedings
- 2004-2005 Organiser and Chairman of the XVI National Congress of Industrial Chemistry 14-17 June 2005
- 2005-2006 Member of the Scientific Council of the XXII National Congress of the Italian Chemical Society, Florence 10-15 September 2006
- 2006-2007 Member of the Scientific Council for the 41th World Chemistry Congress IUPAC Turin, August 5-11
- 2005-2007 Member of the Scientific Council of the XXIII National Congress of the Italian Chemical Society, Sorrento 5-10 July 2009
- 2009-2012 Responsible partner of the EC Project COPIRIDE on Process Intensification
- 2010-2012 Past President of the Industrial Chemistry Division
- 2011 Awarded with the Gold Medal “Emanuele Paternò” by the Italian Chemical Society
- Nov. 2012 Retired from University
- 2013-Now CEO of the Eurochem Engineering srl

Moreover Prof. Elio Santacesaria has been invited to take part in **Conferences in Italy and in different countries** like Germany, India, China, Malesia, Mexico in particular on themes related to Biofuels and Biorefineries.

- He has presented lectures at many Congresses.
- He has organized Intensive courses on: Colloids and Interface Science, Surfactants, Microreactors, Formulations, Safety in Industry.
- He has participated as teacher in the above mentioned courses and in other ones on: Catalysis, Reactor design and Simulation, Kinetics and Mass transfer.
- He has been consultant or stipulated contracts with all the most important Italian chemistry companies and with some foreign Companies, such as: **ASER, AUSIMONT (now SOLVAY), Desmet-BALLESTRA, CAFFARO, CHIMECO, COBARR (Mossi & Ghisolfi Group), CONSER SpA, DOW ITALIA, ENICHEM, EURON (ENI Group), EUROTECNICA, KEMIS, GLARIS, FLORIS, LAMBERTI SpA, MONTEFIBRE, MYTHEN, NOVAMONT, PRESSINDUSTRIA, REDOIL, SCIENTIFIC DESIGN (USA), SISAS, SOLVAY ITALIA, TELESPAZIO, TYSSEN.**
- He has been funded for the research also by the Ministry of the research and University (MIUR), by the Ministry of Foreign Affairs for a collaboration Italia-Mexico, by the European Community - Project COPIRIDE, by the Ministry of Agriculture and by many private industries.
- He is the founder and has been the head of the Naples Industrial Chemistry Laboratory (NIDL) and still collaborates as Consultant with this group. In this position he has hosted foreign

professionals (Chinese, Spanish, Mexican) sent by the respective governments to work in his laboratory and received many visitors from Korea, China, India and Australia.

## Scientific Skill

- Kinetics, Catalysis, Reactor Design and Simulation, Separation Science
- Studied reactions and processes:
- Biodiesel production, New uses for Glycerol,
- Hydrogenation,
- Oxidation (Starch, oleic acid),
- Epoxidation, Alkylation (Cresols, BHT),
- Alkoxylation,
- Polyethoxylation, Polypropoxylation, Surfactant synthesis, Transesterification (Biodiesel and DMT),
- Esterification, Enzymatic Reaction with immobilized enzymes,
- Oxidative Dehydrogenation,
- Yeast production, Hydrogen peroxide production, Special Lubricants, Radical Polymerization,
- Polycondensation,
- Catalysts preparation and Characterization

## Brief CV of Prof. Elio Santacesaria

- Prof. Santacesaria has obtained the Chemistry Degree at the University of Pavia in 1966 with a Thesis developed under the guidance of the Nobel Prize Giulio Natta.
- He worked as researcher at the SNAM Progetti Co. in 1967. Then he obtained a fellowship at the Polytechnic of Milano where he worked until 1970 in collaboration with Prof. Luigi Giuffrè.
- In 1970 he became researcher of the CNR (National Council of Research) always working in the Polytechnic of Milano until 1986 in collaboration with Prof. Sergio Carrà. In this period he developed researches on the following fields: chemistry of propellants, catalysis, kinetics, reactors design and simulation, separation science.
- In the 1986 he won the chair of Industrial Chemistry of Science Faculty of the University of Naples "Federico II".
- He continued the research in almost all the mentioned research themes.
- Santacesaria had been the Coordinator of the research on "Colloid, Interphase and Surfactants" in the National Program of Research "Progetto Finalizzato Chimica Fine" I e II (10 years) giving a great contribution to the improvement of the research efforts in these fields.

- He has been the founder of GICI the Italian Group of Colloid and Interphase Science of the Italian Chemical Society and he has been the Coordinator of this Group for more than ten years (1985 - 1995).
- He is a member of the Italian Chemical Society SCI, of the Italian Association of Chemical Engineers (AIDIC), of the American Chemical Society (ACS) and of the International Association of Colloids and Interphase (IACIS) and of IUPAC.
- He had been organizer of many national and international Congresses, workshops and post-doctoral schools.
- He has been member of the Scientific Committee of the Industrial Chemistry Division of the Italian Chemical Society for 10 years.
- He has then been elected President of the Industrial Chemistry Division of the Italian Chemical Society for the period 2004-2006 renowned for the 2007-2009 and member of the Council as Past President in 2010-2012.
- He has been President of the Council of the Industrial Chemistry Degree Course from 1994 until 2009.
- He has collaborated with many Italian chemical industries.
- He has published more than 250 papers on qualified journals and is coauthor of more than 20 Patents.
- In 2011 **has been awarded by the Italian Chemical Society with the Gold Medal entitled to “Emanuele Paternò”** with the following motivation:

*“Scienziato di levatura mondiale nello studio ed implementazione di processi chimici eco-sostenibili, particolarmente nei campi della produzione dei tensioattivi non ionici, dell’acqua ossigenata e più recentemente della produzione di biodiesel, il professor Santacesaria si è sempre caratterizzato per il suo stretto rapporto con numerose aziende chimiche italiane per le quali ha sviluppato nuovi processi o ne ha migliorato le tecnologie. Maestro di chimica industriale per i suoi studenti e collaboratori, ha continuamente svolto un’intensa e rilevante opera nella società chimica italiana, non solo nei campi scientifici a lui più vicini ma anche in altri, quali ad esempio il bando delle armi chimiche, in cui ha potuto far risaltare i propri valori etici”*

*“Scientist of world reputation level in the study and implementation of eco-sustainable chemical processes, in particular in the fields of the production of non-ionic surfactants, of the hydrogen peroxide and more recently of the biodiesel production, Prof. Elio Santacesaria is characterized by a strict relation with many Italian chemical companies developing for those companies new processes or improving their technologies. Master of Industrial Chemistry for his students and co-workers, he has continuously developed an intense and relevant activity for the Italian Chemical Society, not only in the scientific ambit close to his main activity but also in other fields such as the ban on chemical weapons, thus showing his ethical values”.*

- In November 2012 he has retired from the University and started a new activity as responsible of a Spin Off Company named **Eurochem Engineering srl** located in Milano.

**Prof. Elio Santacesaria - list of publications**

- 237 V. Russo, R. Tesser, E. Santacesaria, and M. Di Serio; Kinetics of Propene Oxide Production via Hydrogen Peroxide with TS-1; *Ind. Eng. Chem. Res.* 2014, 53, 6274–6287
- 236 R. Vitiello, V. Russo, R. Turco, R. Tesser, M. Di Serio, E. Santacesaria; Glycerol chlorination in a gas liquid semibatch reactor: New catalysts for chlorohydrin production; *Chinese Journal of Catalysis* 35 (2014) 663–669
- 235 E. Santacesaria, R. Vitiello, R. Tesser, V. Russo, R. Turco, M. Di Serio; Chemical and Technical Aspects of the Synthesis of Chlorohydrins from Glycerol; Submitted for publication to *Industrial & Engineering Chemistry Research* (2014) 53, 8939-8962
- 234 R. Turco, R. Vitiello, V. Russo, R. Tesser, E. Santacesaria, M. Di Serio; Selective epoxidation of soybean oil with performic acid catalyzed by acidic ionic exchange resins; *Green Processing and Synthesis* 2 (5), 427-434 (2013)
- 233 R. Turco, J. Haber, I. Yuranov, V. Russo, E. Santacesaria, L. Kiwi-Minsker; Sintered metal fibers coated with transition metal oxides as structured catalysts for hydrogen peroxide decomposition; *Chemical Engineering and Processing: Process Intensification*; 73(2013)16-22
- 232 V. Russo, L. Protasova, R. Turco, M.H.J.M. de Croon, V. Hessel, E. Santacesaria; Hydrogen Peroxide Decomposition on Manganese Oxide Supported Catalyst: From Batch Reactor to Continuous Microreactor; *Ind. Eng. Chem. Res.* 2013, 52, 7668–7676
- 231 V. Russo, R. Tesser, E. Santacesaria, M. Di Serio; Chemical and Technical Aspects of Propene Oxide Production via Hydrogen Peroxide (HPPO Process); *Industrial & Engineering Chemistry Research* (2013) 52, 1168-1178
- 230 D. Sannino, V. Vaiano, P. Ciambelli, G. Carotenuto, M. Di Serio, E. Santacesaria; Enhanced performances of grafted VOx on titania/silica for the selective photocatalytic oxidation of ethanol to acetaldehyde; *Catalysis Today* 209 (2013) 159– 163
- 229 G. Carotenuto, R. Tesser, M. Di Serio, E. Santacesaria; Bioethanol as feedstock for chemicals such as acetaldehyde, ethyl acetate and pure hydrogen; *Biomass Conv. Bioref.*(2013) 3:55-67
- 228 G. Carotenuto, A Kumar, J. Miller, A Mukasyan, E. Santacesaria, E.E. Wolf; Hydrogen production by ethanol decomposition and partial oxidation over copper/copper-chromite catalysts prepared by combustion synthesis; *Catalysis Today*: 203(2013)163-175
- 227 G. Carotenuto, R. Tesser, M. Di Serio, E. Santacesaria; Kinetic study of ethanol dehydrogenation to ethyl acetate promoted by a copper and copper chromite catalyst;

Catalysis Today: 203(2013)202-210

- 226 E. Salzano, A. Garcia Agreda, V. Russo, M. Di Serio; Safety Criteria for the Epoxydation of Soybean Oil in Fed-Batch Reactor; E. Santacesaria; Chemical Engineering Transaction 26 (2012) 39-44
- 225 R. Vitiello, A. Buonerba, R. Tesser, M. Di Serio, A. Grassi, E. Santacesaria; Use of Waste Materials for Biodiesel Production; DGMK Conference Proceedings October 8-10, 2012, Berlin, Germany
- 224 V Russo, R Tesser, M Di Serio, E Santacesaria; A New Kinetic Biphasic Approach to Biodiesel Process Intensification; DGMK Conference Proceedings October 8-10, 2012, Berlin, Germany
- 223 M. Di Serio, S. Mallardo, G. Carotenuto, R. Tesser, E. Santacesaria; Mg/Al hydrotalcite catalyst for biodiesel production in continuous packed bed reactors; Catalysis Today: 195(2012) (1)54-58
- 222 M. Di Serio, R. Turco, P. Pernice, A. Aronne, F. Sannino, E. Santacesaria; Valuation of Nb<sub>2</sub>O<sub>5</sub>-SiO<sub>2</sub> catalysts in soybean oil epoxidation; Catalysis Today: 192 (2012) (1), 112-116
- 221 E. Santacesaria, G. Martinez Vicente, M. Di Serio, R. Tesser; Main Technologies in biodiesel production: State of the art and future challenges; Catalysis Today: 195 (2012) (1), 2-13
- 220 E. Santacesaria, R. Turco, M. Tortorelli, V. Russo, M. Di Serio, R. Tesser; Biodiesel process intensification: the role of the liquid-liquid interface area in the achievement of a complete conversion in few seconds; Green Process Synth. 1(2012) 181-189
- 219 E. Santacesaria, M. Di Serio, R. Tesser, R. Turco, M. Tortorelli, V. Russo; Biodiesel Process Intensification in a very simple microchannel device; Chemical Engineering and Processing: Process Intensification 52(2012)47-54
- 218 R. Tesser, M. Di Serio, R. Vitiello, V. Russo, E. Ranieri, E. Speranza, E. Santacesaria; Glycerol Chlorination in Gas-Liquid Semibatch Reactor: An Alternative Route for Chlorohydrins Production; Industrial & Engineering Chemistry Research 51 (2012) 8768-8776.
- 217 E. Santacesaria, A. Renken, V. Russo, R. Turco, R. Tesser, M. Di Serio; Biphasic Model Describing Soybean Oil Epoxidation with H<sub>2</sub>O<sub>2</sub> in Continuous Reactors; Industrial & Engineering Chemistry Research 51 (2012) 8760-8767.
- 216 E. Santacesaria, R. Turco, M. Tortorelli, V. Russo, M. Di Serio, R. Tesser; Biodiesel Process Intensification by Using Static Mixers Tubular Reactors; Industrial & Engineering Chemistry Research 51 (2012) 8777-8787.

- 215 D. Kralisch, I. Streckmann, U. Krtschil, E. Santacesaria, M. Di Serio, V. Russo, L. DeCarlo, W. Linhart, E. Christian, B. Cortese, M.H.J.M. de Croon, V. Hessel; Transfer of the Epoxidation of Soybean Oil from Batch to Flow Chemistry – Guided by Cost and Environmental Issues; *ChemSusChem*; 5(2012)300-311.
- 214 E. Santacesaria, G. Carotenuto, R. Tesser, M. Di Serio; Ethanol Dehydrogenation to Ethyl Acetate by Using Copper and Copper Chromite Catalysts; *Chemical Engineering Journal* 179(2012)209-220
- 213 E. Santacesaria, M. Di Serio, R. Tesser, M. Tortorelli, R. Turco, V. Russo; A simple device to test biodiesel process intensification; *Chemical Engineering and Processing: Process Intensification*; 50(2011)1085-1094
- 212 E. Santacesaria; The proposal of a charter of the ethical principles of chemical sciences by the Italian Chemical Society; *La Chimica e L'Industria* 112, Sett. (2011)
- 211 E. Santacesaria, G. Carotenuto, R. Tesser, M. Di Serio; Study of the Performance of Vanadium Based Catalysts Prepared by Grafting in the Oxidative Dehydrogenation of Propane; *Catalysis – Innovative Applications in Petrochemistry and Refining*; DGMK Conference Proceedings October 4-6, 2011, Dresden, Germany
- 210 E. Santacesaria; R. Tesser; M. Di Serio; R. Turco; V. Russo; D. Verde; A biphasic model describing soybean oil epoxidation with H<sub>2</sub>O<sub>2</sub> in a fed-batch reactor; *Chemical Engineering Journal* (2011), 173(1), 198-209.
- 209 E. Santacesaria, R. Tesser, M. Di Serio, V. Russo, R. Turco. A New Simple Microchannel Device to Test Process Intensification. *Industrial & Engineering Chemistry Research* (2011) 50, 2569-2575.
- 208 E. Santacesaria; G. Carotenuto; R. Tesser; M. Di Serio. Production of pure hydrogen by ethanol dehydrogenation. *Oil, Gas European Magazine* (Hamburg, Germany) (2011), 37(2), 99-102.
- 207 E. Santacesaria; G. Carotenuto; R. Tesser; M. Di Serio; Production of pure hydrogen by ethanol dehydrogenation. *DGMK Conference Proceedings* October 4-6, 2010, Berlin, Germany
- 206 E. Salzano, M. Di Serio, and E. Santacesaria. Emerging Risks in the Biodiesel Production by Transesterification of Virgin and Renewable Oil. *Energy Fuels*, 2010, 24 (11), pp 6103–6109
- 205 R. Tesser, M. Di Serio, L. Casale, G. Carotenuto and E. Santacesaria; Absorption of Water/Methanol Binary System on Ion-Exchange Resins; *The Canadian Journal of Chemical Engineering* 2010, 88 (6), pp 1044-1053
- 204 Di Serio M., Casale L., Tesser R., Santacesaria E. New Process for the Production of Glycerol tert-Butyl Ethers; *Energy & Fuels* (2010), 24(9), 4668-4672.

- 203 Riccardo T., Di Serio M., Casale L., Sannino L., Ledda M., Santacesaria E.; Acid exchange resins deactivation in the esterification of free fatty acids; *Chemical Engineering Journal* 161 (2010) 212–222
- 202 Di Serio M., Tesser R., Casale L., A. D'Angelo, M. Trifuoggi and E. Santacesaria; Heterogeneous Catalysis in Biodiesel Production: The Influence of Leaching. *Topics in Catalysis* (2010), 53 (11-12), 811-819
- 201 Tesser R., Casale L., Verde D., Di Serio M. and Santacesaria E. Kinetics and modeling of fatty acids esterification on acid exchange resins. *Chemical Engineering Journal* (2010), 157(2-3), 539-550
- 200 Santacesaria, E.; Tesser, R.; Di Serio, M.; Casale, L.; Verde, D. New process for producing epichlorohydrin via glycerol chlorination; *Industrial & Engineering Chemistry Research* (2010), 49(3), 964-970.
- 199 Santacesaria, E.; Di Serio, M.; Tesser, R.. New technologies in biodiesel production. *Chimica e l'Industria* (Milan, Italy) (2009), 91(5), 126-129
- 198 Santacesaria, Elio. Sustainable development and biorefineries. *La Chimica e l'Industria* (Milan, Italy) (2009), 91(5), 100-101
- 197 R. Tesser, L.Casale, D. Verde, M. Di Serio, E. Santacesaria “Kinetics of free fatty acids esterification: Batch and loop reactor modelling” *Chemical Engineering Journal* (2009), 154(1-3), 25-33.
- 196 Tesser, R.; Di Serio, M.; Santacesaria, E.; Methanol steam reforming: A comparison of different kinetics in the simulation of a packed bed reactor”. (2009); *Chemical Engineering Journal* (2009), 154(1-3), 69-75.
- 195 E. Santacesaria, R. Tesser, M. Di Serio, V. Russo; GPE-EPIC; 2nd International Congress on Green Process Engineering, 2nd European Process Intensification Conference; A new simple microchannel device to test process intensification; (2009)
- 194 Santacesaria, Elio; Di Serio, Martino; Tesser, Riccardo “ Production of ethylene oxide/propylene oxide block copolymers”. *Surfactant Science Series* (2009), 142 (Handbook of Detergents, Part F)
- 193 Santacesaria, E.; Di Serio, M.; Tesser, R.; Casale, L.; Verde, D.; Turco, R.; Bertola, A. ; Use of a Corrugated Plates Heat Exchanger Reactor for Obtaining Biodiesel with Very High Productivity *Energy & Fuels* (2009), 23(10), 5206-5212
- 192 Aronne, Antonio; Turco, Maria; Bagnasco, Giovanni; Ramis, Gianguido; Santacesaria, Elio; Di Serio, Martino; Marenga, Elisa; Bevilacqua, Maria; Cammarano, Claudia; Fanelli, Esther. Gel derived niobium-silicon mixed oxides: Characterization and catalytic activity for cyclooctene epoxidation. *Applied Catalysis, A: General* (2008), 347(2), 179-185



- 191 Santacesaria, Elio; Cavenaghi, Carlo; Piccolo, Oreste. Microreactors and process intensification, a new way to design an industrial process. *Chimica e l'Industria* (Milan, Italy) (2008), 90(6), 82-83.
- 190 Santacesaria, E.; Di Serio, M.; Tesser, R.; Casale, L. New technologies in biodiesel production. *DGMK Tagungsbericht* (2008), 2008-3(Preprints of the DGMK-Conference "Future Feedstocks for Fuels and Chemicals", 2008), 7-18.
- 189 Di Serio, Martino; Tesser, Riccardo; Pengmei, Lu; Santacesaria, Elio. Heterogeneous Catalysts for Biodiesel Production. *Energy & Fuels* (2008), 22(1), 207-217.
- 188 Santacesaria, E.; Tesser, R.; Di Serio, M.; Guida, M.; Gaetano, D.; Garcia Agreda, A. Kinetics and Mass Transfer of Free Fatty Acids Esterification with Methanol in a Tubular Packed Bed Reactor: A Key Pretreatment in Biodiesel Production. *Industrial & Engineering Chemistry Research* (2007), 46(15), 5113-5121.
- 187 Salzano, Ernesto; Tortora, Ciro; Di Serio, Martino; Santacesaria, Elio. The evaluation of risks of ethoxylation processes. *AIChE Spring National Meeting, Conference Proceedings, Houston, TX, United States, Apr. 22-27, 2007* (2007)
- 186 Santacesaria, Elio; Cozzolino, Mariangela; Di Serio, Martino; Tesser, Riccardo. Grafting alkoxides on the surface of oxides. A method for preparing new catalysts and supports. *Chimica e l'Industria* (Milan, Italy) (2007), 89(10), 112-119.
- 185 Di Serio, M.; Cozzolino, M.; Giordano, M.; Tesser, R.; Patrono, P.; Santacesaria, E.. From Homogeneous to Heterogeneous Catalysts in Biodiesel Production. *Industrial & Engineering Chemistry Research* (2007), 46(20), 6379-6384.
- 184 Cozzolino, M.; Di Serio, M.; Tesser, R.; Santacesaria, E.. Grafting of titanium alkoxides on high-surface SiO<sub>2</sub> support: An advanced technique for the preparation of nanostructured TiO<sub>2</sub>/SiO<sub>2</sub> catalysts. *Applied Catalysis, A: General* (2007), 325(2), 256-262.
- 183 Di Serio, M.; Cozzolino, M.; Tesser, R.; Patrono, P.; Pinzari, F.; Bonelli, B.; Santacesaria, E.. Vanadyl phosphate catalysts in biodiesel production. *Applied Catalysis, A: General* (2007), 320 1-7.
- 182 Salzano, Ernesto; Di Serio, Martino; Santacesaria, Elio. The evaluation of risks of ethoxylation reactors. *Process Safety Progress* (2007), 26(4), 304-311.
- 181 Salzano, Ernesto; Di Serio, Martino; Santacesaria, Elio. The role of recirculation loop on the risk of ethoxylation processes. *Journal of Loss Prevention in the Process Industries* (2007), 20(3), 238-250.
- 180 Bonelli, B.; Cozzolino, M.; Tesser, R.; Di Serio, M.; Piumetti, M.; Garrone, E.; Santacesaria, E. Study of the surface acidity of TiO<sub>2</sub>/SiO<sub>2</sub> catalysts by means of FTIR measurements of CO and NH<sub>3</sub> adsorption. *Journal of Catalysis* (2007), 246(2), 293-300.

- 179 Cozzolino, M.; Tesser, R.; Di Serio, M.; D'Onofrio, P.; Santacesaria, E.. Kinetics of the oxidative dehydrogenation (ODH) of methanol to formaldehyde by supported vanadium-based nanocatalysts. *Catalysis Today* (2007), 128(3-4), 191-200.
- 178 Tesser, R.; Santacesaria, E.; Di Serio, M.; Di Nuzzi, G.; Fiandra, V. Kinetics of glycerol chlorination with hydrochloric acid: a new route to  $\alpha,\gamma$ -dichlorohydrin. *Industrial & Engineering Chemistry Research* (2007), 46(20), 6456-6465.
- 177 Santacesaria, E.; Tesser, R.; Di Serio, M.; Guida, M.; Gaetano, D.; Garcia Agreda, A.; Cammarota, F. Comparison of Different Reactor Configurations for the Reduction of Free Acidity in Raw Materials for Biodiesel Production. *Industrial & Engineering Chemistry Research* (2007), 46(25), 8355-8362.
- 176 Salzano, Ernesto; Di Serio, Martino; Tortora, Ciro; Santacesaria, Elio. Consequence-based safety analysis of alkoxylation processes. *Institution of Chemical Engineers Symposium Series* (2007), 153 paper109/1-paper109/6.
- 175 Ricci, Alfredo; Santacesaria, Elio. Science and technology. The program of IT-SusChem Platform/RPD. *Chimica e l'Industria* (Milan, Italy) (2007), 89(2), 114-117.
- 174 M. Cozzolino, R. Tesser, M. Di Serio, M. Ledda, G. Minutillo, E. Santacesaria. "Preparation, characterization and catalytic performances of highly dispersed supported TiO<sub>2</sub>/SiO<sub>2</sub> catalysts in biodiesel production." *Studies in Surface Science and Catalysis* (2006), 162 (Scientific Bases for Preparation of Heterogeneous Catalysts), 299-306.
- 173 Di Serio, M.; Ledda, M.; Cozzolino, M.; Minutillo, G.; Tesser, R.; Santacesaria E. "Transesterification of Soybean Oil to Biodiesel by Using Heterogeneous Basic Catalysts." *Industrial & Engineering Chemistry Research* (2006), 45(9), 3009-3014.
- 172 Di Serio, M.; Tesser, R.; Cozzolino, M.; Santacesaria. "Prediction of vapour-liquid equilibria for the kinetic study of processes based on synthesis gas." *DGMK Tagungsbericht* (2006), 2006-4 (Proceedings of the DGMK/SCI-Conference "Synthesis Gas Chemistry", 2006), 109-115
- 171 Santacesaria, E.; Cozzolino, M.; Balato, V.; Tesser, R.; Di Serio, M.; Ruffo, F. Preparation and characterization of dispersed palladium catalysts supported on carbon previously treated with different strong oxidants. *Khimiya v Interesakh Ustoichivogo Razvitiya* (2006), 14(6), 605-611.
- 170 M. Cozzolino, R. Tesser, M. Di Serio, E.M. Gaigneaux, P. Eloy, E. Santacesaria. "Supported vanadium oxide nanoparticles: effects of preparation method, support and type of precursor on the catalytic performances in the ODH of methanol to formaldehyde." *Studies in Surface Science and Catalysis* (2006), 162 (Scientific Bases for Preparation of Heterogeneous Catalysts), 697-704.
- 169 E. Santacesaria; Gli accordi Internazionali sul bando di armi chimiche; *La Chimica e*

- l'Industria*, 87, 5, 34-38 (2005)
- 168 Cozzolino, M.; Tesser, R.; Di Serio, M.; Santacesaria, E. "Methanol and ethanol oxidative dehydrogenation (ODH) to the corresponding aldehydes on vanadium-based catalysts." *DGMK Tagungsbericht* (2005), 2005-2 (Proceedings of the DGMK/SCI-Conference "Oxidation and Functionalization: Classical and Alternative Routes and Sources", 2005), 91-98
- 167 Di Serio, M.; Tesser, R.; Dimiccoli, M.; Cammarota, F.; Nastasi, M.; Santacesaria, "Synthesis of biodiesel via homogeneous Lewis acid catalyst " *Journal of Molecular Catalysis A: Chemical* (2005), 239(1-2), 111-115.
- 166 Santacesaria, Elio; Di Serio, Martino; Tesser, Riccardo; Cammarota, Francesco. "Comparison between the Performances of a Well-Stirred Slurry Reactor and a Spray Loop Reactor for the Alkylation of p-Cresol with Isobutene." *Industrial & Engineering Chemistry Research* (2005), 44(25), 9473-9481.
- 165 Santacesaria, Elio; Di Serio, Martino; Tesser, Riccardo. "Gas-Liquid and Gas-Liquid-Solid Reactions Performed in Spray Tower Loop Reactors." *Industrial & Engineering Chemistry Research* (2005), 44(25), 9461-9472
- 164 Tesser, R.; Di Serio, M.; Guida, M.; Nastasi, M.; Santacesaria, E. "Kinetics of Oleic Acid Esterification with Methanol in the Presence of Triglycerides" *Industrial & Engineering Chemistry Research* (2005), 44(21), 7978-7982.
- 163 Di Serio, Martino; Tesser, Riccardo; Santacesaria, Elio. "Comparison of Different Reactor Types Used in the Manufacture of Ethoxylated, Propoxylated Products." *Industrial & Engineering Chemistry Research* (2005), 44(25), 9482-9489.
- 162 Tesser, Riccardo; Bottino, Aldo; Capannelli, Gustavo; Montagnaro, Fabio; Vitolo, Stefano; Di Serio, Martino; Santacesaria, Elio. "Advantages in the Use of Membrane Contactors for the Study of Gas-Liquid and Gas-Liquid-Solid Reactions." *Industrial & Engineering Chemistry Research* (2005), 44(25), 9451-9460
- 161 Tesser, Riccardo; Passaretti, Adele; Di Serio, Martino; Bragante, Letanzio; Santacesaria, E "Phase Equilibria in Binary Mixtures Refrigerant + Fluorinated Lubricating Oil: Vapor-Liquid and Liquid-Liquid Measurements." *Journal of Chemical and Engineering Data* (2004), 49(4), 838-846
- 160 Tesser, R.; Maradei, V.; Di Serio, M.; Santacesaria, E. "Kinetics of the Oxidative Dehydrogenation of Ethanol to Acetaldehyde on V<sub>2</sub>O<sub>5</sub>/TiO<sub>2</sub>-SiO<sub>2</sub> Catalysts Prepared by Grafting". *Industrial & Engineering Chemistry Research* (2004), 43(7), 1623-1633.
- 159 Cozzolino, M.; Tesser, R.; Di Serio, M.; Santacesaria, E. "Oxidative dehydrogenation of n-butane on vanadium-based catalysts prepared by grafting. DGMK" *Tagungsbericht* (2004), 2004-3(Proceedings of the DGMK-Conference "C<sub>4</sub>/C<sub>5</sub>-Hydrocarbons: Routes to

- Higher Value-Added Products", (2004), 117-124.
- 158 Santacesaria E., R.Tesser, M. Di Serio "Kinetics of Methanol Steam Reforming on Cuo-ZnO catalysts." Chemical Engineering Transaction; Vol. 4, 191-197, (2004)
- 157 Santacesaria, E.; Cozzolino, M.; Tesser, R.; Di Serio, "Skeletal isomerization of 1-butene to isobutene over acid catalysts obtained by grafting silicon alkoxide on -alumina." M. DGMK Tagungsbericht (2004), 2004-3 (Proceedings of the DGMK-Conference "C4/C5-Hydrocarbons: Routes to Higher Value-Added Products", 2004), 77-85.
- 156 Santacesaria, E.; Cozzolino, M.; Di Serio, M.; Venezia, A. M.; Tesser, R. "Vanadium based catalysts prepared by grafting: preparation, properties and performances in the ODH of butane." Applied Catalysis, A: General (2004), 270(1-2), 177-192.
- 155 Tesser, R.; Di Serio, M.; Sclafani, A.; Santacesaria, E. "Modeling of polyurethane foam formation" Journal of Applied Polymer Science (2004), 92(3), 1875-1886.
- 154 Di Serio, M.; Tesser, R.; Ferrara, A.; Santacesaria, E. "Heterogeneous basic catalysts for the transesterification and the polycondensation reactions in PET production from DMT." Journal of Molecular Catalysis A: Chemical (2004), 212(1-2), 251-257.
- 153 E. Santacesaria; Nuove professionalità dalle formulazioni; La Chimica e l'Industria; 85, 9 (2003)
- 152 R. Tesser, M. Di Serio, E. Santacesaria "Catalytic oxidation of methanol to formaldehyde: an example of kinetics with transport phenomena in a packed-bed reactor". Catalysis Today 77 (2003) 325-333
- 151 R.Tesser, M. Di Serio, R.Gargiulo, G. Basile, L. Bragante, E. Santacesaria Vapour-liquid equilibrium measurements for binary mixtures of R32, R143a, R134a and R125 with a perfluoropolyether lubricant. Journal of Fluorine Chemistry 121(2003),1, 15-22
- 150 Comite, A.; Sorrentino, A.; Capannelli, G.; Di Serio, M.; Tesser, R.; Santacesaria, E. "Oxidative dehydrogenation of propane using V<sub>2</sub>O<sub>5</sub>/TiO<sub>2</sub>/SiO<sub>2</sub> catalysts prepared by grafting titanium and vanadium alkoxides on silica." Journal of Molecular Catalysis A: Chemical (2003), 198(1-2), 151-165.
- 149 Santacesaria, E.; Ambrosio, M.; Sorrentino, A.; Tesser, R.; Di Serio, M. "Double bond oxidative cleavage of monoenic fatty chains. Catalysis Today (2003), 79-80, 59-65.
- 148 R. Tesser, M. Di Serio, E. Santacesaria; "Influence of the vapour-liquid equilibria (VLE) on the kinetics in gas-liquid and gas-liquid-solid systems" Catalysis Today- (2003), 79-80, 323-331
- 147 M. Di Serio, C. Maturo, E. De Alteriis, P. Parascandola, R. Tesser, E. Santacesaria "Lactose Hydrolysis by Immobilized  $\beta$ -Galactosidase: The Effect of the Supports and

- the Kinetics". *Catalysis Today*- (2003) 79-80, 333-339
- 146 Iannazzo, V.; Neri, G.; Galvagno, S.; Di Serio, M.; Tesser, R.; Santacesaria, E. "Oxidative dehydrogenation of isobutane over V<sub>2</sub>O<sub>5</sub>-based catalysts prepared by grafting vanadyl alkoxides on TiO<sub>2</sub>-SiO<sub>2</sub> supports" *Applied Catalysis, A: General* (2003), 246(1), 49-68.
- 145 Santacesaria, E.; Sorrentino, A.; Tesser, R.; Di Serio, M.; Ruggiero, A. "Oxidative dehydrogenation of ethanol to acetaldehyde on V<sub>2</sub>O<sub>5</sub>/TiO<sub>2</sub>-SiO<sub>2</sub> catalysts obtained by grafting vanadium and titanium alkoxides on silica" *Journal of Molecular Catalysis A: Chemical* (2003), 204-205 617-627.
- 144 M. Di Serio, P. Aramo, E. de Alteriis, R. Tesser, E. Santacesaria; "Quantitative analysis of the key factors affecting yeast growth"; *Ind. Eng. Chem. Research* (2003), 42, 5109-5116
- 143 E. Santacesaria, A. Sorrentino, M. Di Serio, R. Tesser; "Acid-Base and Redox Catalysts Preparation by Grafting Alkoxides on the Surface of Oxides"; *Preprints Symposia of the Division of Petroleum Chemistry, American Chemical Society Vol. 47, No. 3* (2002) 262-264
- 142 E. Santacesaria, A. Sorrentino, M. Di Serio, R. Tesser; "Supports and catalysts preparation by using metal alkoxides grafting technique". *Studies in Surface Science and Catalysis* 143, E. Gaigneaux et al. Editors, Elsevier Sci. (2002), 77-87
- 141 E. Santacesaria "Nuove prospettive per ottenere l'acido azelaico da acido oleico" *La Chimica e l'Industria* 30(2002) 84
- 140 R. Tesser, M. Di Serio, M. Ambrosio, E. Santacesaria "Heterogeneous catalysts for the production of anthraquinone from 2-benzoylbenzoic acid" *Chemical Engineering Journal* 90(2002) 195-201
- 139 M. Di Serio, R. Tesser, A. Dimiccoli, E. Santacesaria "Kinetics of Ethoxylation and Propoxylation of Ethylene Glycol Catalyzed by KOH" *Ind. Eng. Chem. Res.* 41 (2002) 5196-5206
- 138 A. Auroux, R. Monaci, E. Rombi, V. Solinas, A. Sorrentino, E. Santacesaria "Acid sites investigation of simple and mixed oxides by TPD and microcalorimetric techniques". *Thermochimica Acta* 379 (2001) 227-231
- 137 R. Monaci, E. Rombi, V. Solinas, V. Sorrentino, E. Santacesaria, G. Colon "Oxidative dehydrogenation of propane over V<sub>2</sub>O<sub>5</sub>/TiO<sub>2</sub>/SiO<sub>2</sub> catalysts obtained by grafting titanium and vanadium alkoxides on silica". *Applied Catalysis A: General* 214 (2001) 203-212
- 136 A. Sorrentino, S. Rega, D. Sonnino, A. Magliano, P. Ciambelli, E. Santacesaria "Performances of V<sub>2</sub>O<sub>5</sub>-based catalysts obtained by grafting vanadyl tri-isopropoxide

- on TiO<sub>2</sub>-SiO<sub>2</sub> in SCR”. *Applied Catalysis A: General* 209 (2001) 45-57
- 135 M. Di Serio, R. Tesser, E. Santacesaria “A kinetic and mass transfer model to simulate the growth of baker’s yeast in industrial bioreactors”. A Special Issue on “Frontiers in Chemical Reaction Engineering” *Chem. Eng. Journal* 82(2001) 347-354
- 134 M. Di Serio, E. De Alteris, P. Parascandola, E. Santacesaria “A general kinetic and mass transfer model to simulate the baker’s yeast growth in bioreactors”. *Catalysis Today* 66 (2001) 437-445
- 133 M. Di Serio, V. Balato, A. Dimiccoli, L. Maffucci, P. Iengo, E. Santacesaria “Kinetic and mass transfer in the hydrogenation of polyunsaturated organic compounds in the presence of supported Pd Catalysts”. *Catalysis Today* 66 (2001) 403-410
- 132 E. Santacesaria, A. Scaglione, B. Apicella, R. Tesser, M. Di Serio “Synthesis and purification of antraquinone in a multifunctional reactor”. *Catalysis Today* 66 (2001) 167-174
- 131 A. Dimiccoli, M. Di Serio, E. Santacesaria; “Mass Transfer and Kinetics in Spray-Tower-Loop Absorbers and Reactors”. *Ind. Eng. Chem. Res.* 39, 4082-4093 (2000)
- 130 E. Santacesaria, A. Sorrentino, F. Rainone, M. Di Serio, F. Speranza; “Oxidative cleavage of the double bond of monoenic fatty chains in two steps: a new promising route to azelaic acid and other industrial products”. *Ind. Eng. Chem. Res.* 39, 2766-2771 (2000)
- 129 A. Dimiccoli, M. Di Serio, E. Santacesaria; “Key factor in ethoxylation and propoxylation technology”. 5RD CESIO, Proceedings, World Surfactant Congress, Firenze, vol. 1, 99-110 (2000)
- 128 E. Musso, R. Tesser, G. Basile, M. Di Serio, E. Santacesaria “Description of liquid-liquid equilibrium in binary and multicomponent mixtures of CFC/Lubrificanting oil by means of an extended Flory-Huggins Model”. *J. of Fluorine Chem.* 103, 41-51 (2000)
- 127 E. Santacesaria, M. Di Serio, P. Iengo; “Examples of Hydrogenation in Semibatch and Continuous Slurry Reactors”. *Catalysis Today* 52,363-376 (1999)
- 126 E. Santacesaria; “Fundamental chemical kinetics: the first step to reaction modelling and reaction engineering”. *Catalysis Today* 52(1999) 113-123
- 125 R. Tesser, E. Musso, M. Di Serio, G. Basile, E. Santacesaria, “Description of the Vapor-Liquid Equilibrium in Binary Refrigerant/Lubrificanting Oil Systems by means of a Extended FLORY-HUGGINS Model”. *J. of Fluorine Chem.* 99, 29-36 (1999)
- 124 E. Santacesaria, M. Di Serio, A. Russo, U. Leone, R. Velotti “Kinetic and catalytic aspects in the hydrogen peroxide production via anthraquinone”. *Chem. Eng. Sci.* 54, 2799-2806 (1999)

- 123 E. Santacesaria, P. Iengo, M. Di Serio "Catalytic and kinetic effects in ethoxylation processes". (D.R. Karsa Ed.) Design and Selection of Performance Surfactants, Sheffield Academic Press (1999)
- 122 G. Chiacchio, M. Malinconico, E. Santacesaria, M. Di Serio; "PET post-consumo: da problema ad opportunità" La Chimica e L'Industria 81, 355-360 (1999)
- 121 E. Santacesaria, M. Di Serio, P. Iengo; "Mass transfer and kinetics in ethoxylation spray tower loop reactors". Chem. Eng. Sci. 54, 1499-1504 (1999)
- 120 B. Apicella, E. Santacesaria, M. Di Serio; "Kinetic and catalytic aspects in the synthesis of polyethylene terephthalate (PET), also through the use of model molecules". (G.F. Froment and K.C. Waugh Eds) Reaction Kinetics and the Development of Catalytic Process, 431-434, Elsevier Science B.V. (1999)
- 119 E. Santacesaria, M. Di Serio, P. Iengo; "Kinetic and reactor simulation for polyethoxylation and polypropoxylation reactions". (G.F. Froment and K.C. Waugh Eds) Reaction Kinetics and the Development of Catalytic Process, 267-274, Elsevier Science B.V. (1999)
- 118 R. Improta, M. Di Serio, E. Santacesaria "Aluminium alkoxide sulphate catalyst: a computational study". J. of Molecular Catalysis, A: Chemical 137, 169-182 (1999)
- 117 P. Iengo, M. Di Serio, D. Gazzoli, G. Aprile, E. Santacesaria "Preparation and properties of new acid catalysts obtained by grafting alkoxides and derivatives on the most common supports. Note III- Grafting titanium and vanadil alkoxides on silica". Applied Catalysis A: General 178, 97-109 (1999)
- 116 E. Santacesaria; "Laurea in Chimica Industriale: commenti sulla struttura attuale e sull'opportunità di modificarla". La Chimica e l'Industria 80(1998)347-348.
- 115 Iengo, M. Di Serio, V. Solinas, D. Gazzoli, G. Salvio, E. Santacesaria "Preparation and properties of new acid catalysts obtained by grafting alkoxides and derivatives on the most common supports. Note II- Grafting silicon and zirconium alkoxides and related sulphates on -alumina". Applied Catalysis A: General 170, 225-244 (1998)
- 114 B. Apicella, M. Di Serio, L. Fiocca, R. Po, E. Santacesaria "Kinetic and catalytic aspects of the formation of poly(ethyleneterephthalate) (PET) investigated with model molecules" J. of Applied Polymer Science 69, 2423-2433 (1998)
- 113 M. Di Serio, B. Apicella, G. Grieco, P. Iengo, L. Fiocca, R. Po, E. Santacesaria "Kinetic and catalytic aspects of dimethylterephthalate transesterification also through the use of model molecules". J. of Molecular Catalysis. A: Chemical 130, 233-240 (1998)
- 112 V. Aruta, M. Malinconico, F. Pota, E. Santacesaria; "Rivestimenti in polvere per un miglior rapporto con l'ambiente" MACPLAS 22(1997) 189, 81-83

- 111 L. Maffucci, P. Iengo, M. Di Serio, E. Santacesaria; "A rapid method to evaluate the dispersion of palladium in supported catalysts". *J. of Catalysis*, 172 (2) 485-487 (1997)
- 110 M. Di Serio, P. Iengo, G. Vairo, E. Santacesaria; "Narrow range ethoxylation of fatty alcohols promoted by zirconium alkoxide sulphate catalyst". *Journal of Surfactant and Detergent* 1 (1998) 1, 83-91
- 109 P. Iengo, M. Di Serio, A. Sorrentino, V. Solinas, E. Santacesaria "Preparation and properties of new acid catalysts obtained by grafting alkoxides and derivatives on the most common supports. Note I- Grafting aluminum and zirconium alkoxides and related sulphates on silica". *Applied Catalysis A*, 167 (1998) 85,101
- 108 E. Santacesaria; "Kinetics and Transport Phenomena in Heterogeneous Gas-Solid and Gas-Liquid-Solid Systems"; *Catalysis Today*, 34,411 (1997)
- 107 E.Santacesaria; "The kinetics of Heterogeneous Catalytic Reactions" *Catalysis Today*, 34, 393 (1997)
- 106 E. Santacesaria, M. Di Serio, P. Iengo; Narrow Range Ethoxylation obtained with alkoxides sulphate catalysts; 4th World Surfactant Congress Barcelona, 3-7 (1996) 497-506
- 105 M. Di Serio, G. Vairo, P. Iengo, F. Felippone, E. Santacesaria; " Kinetics of ethoxylation and Propoxylation of 1 and 2-octanol catalyzed by KOH" *Ind. and Eng. Chem. Research*, 35, 3848 (1996)
- 104 E.Santacesaria, M. Di Serio, P. Iengo; "Un catalizzatore a base di alluminio alcossido solfato per l'etossilazione di alcoli grassi"; *La Rivista Italiana delle Sostanze Grasse*, LXXIII,169 (1996)
- 103 M. Di Serio, R. Tesser, F. Trulli, E. Santacesaria; " Kinetic and Catalytic Aspects in Melt Transesterification of Dimethylterephthalate with Ethylene Glycol in the Presence of Different Catalytic Systems. *Journal of Applied Polymer Science*, 62,409 (1996)
- 102 M. Di Serio, P. Iengo, R. Gobetto, S. Bruni, E. Santacesaria; " Ethoxylation of fatty alcohols promoted by an aluminum alkoxide sulphate catalyst"; *Journal Molecular Catalysis A: Chemical* 112, 235 (1996)
- 101 E. Musso, M. Di Serio, R. Tesser, L. Cavallo, G. Basile, E. Santacesaria; " Vapour pressures of fluorocarbons in polyols, polyamines and polycarboxyls"; *Journal of Fluorine Chemistry* 78 (1996) 167-175
- 100 M. Di Serio, R. Tesser, F. Felippone, E. Santacesaria; "Ethylene oxide solubility and ethoxylation kinetics in the synthesis of nonionic surfactants"; *Ind. Eng. Chem. Research* 34, 4092-4098 (1995)
- 99 E. Santacesaria, M. Di Serio, R. Tesser; "Role of ethylene oxide solubility in the



- ethoxylation processes”; *Catalysis Today* 24,23-28 (1995)
- 98 M. Di Serio, E. Santacesaria, A. Santambrogio, G. Polimeni; “The radical polymerization of C12-C18 alkylmethacrylates in semibatch conditions.” *J. of Applied Polymer Science*, Vol. 56, pp 1141-1149 (1995)
- 97 E. Santacesaria, M. Di Serio, R. Velotti, U. Leone; “Hydrogenation of the aromatic rings of 2-ethylanthraquinone on palladium catalyst”; *J. of Molecular Catalysis* 94, 37-46, (1994)
- 96 E. Santacesaria, P. Parrella, M. Di Serio, G. Borrelli; “Role of mass transfer and kinetics in the hydrogenation of rapeseed oil on a supported palladium catalyst” *Applied Catalysis* 116,1-2,269-294 (1994)
- 95 E. Santacesaria, F. Trulli, L. Minervini, M. Di Serio, R. Tesser, S. Contessa “Kinetic and Catalytic Aspects in Melt Transesterification of Dimethyl Terephthalate With Ethylene Glycol” *J. of Applied Polymer Science* 54,9,1371-1384 (1994)
- 94 G. Basile, E. Musso, R. Tesser, M. Di Serio, E. Santacesaria “Polyol and Blowing Agent Binary System Described by Means of the Flory Model” *Cellular Polymers* 13,98-112 (1994)
- 93 E. Santacesaria, F. Trulli, G. F. Brussani, D. Gelosa, M. Di Serio ; "Oxidized glucosidic oligomers: a new class of sequestering agents-preparation and properties" *Carbohydrate Polymers* 23,35-46 (1994)
- 92 E. Santacesaria, M. Di Serio, R. Velotti, U. Leone Deactivation of Palladium Catalyst in the hydrogenation of 2-ethyl 5,6,7,8-tetrahydroanthraquinone. ( D. Delmon and G.F. Froment Eds.) *Studies in Surface Science and Catalysis*, Vol. 88, 597-602, Elsevier Science B.V. (1994)
- 91 M. Di Serio, S. Di Martino, E. Santacesaria; “Kinetics of Fatty Acids Polyethoxylation” *Ind. Eng. Chem. Res.*33,3,509(1994)
- 90 E. Santacesaria, M. Di Serio, R. Velotti, U. Leone; "Kinetics,Mass Transfer,and Palladium Catalyst Deactivation in the Hydrogenation Step of the Hydrogen Peroxide Synthesis via Anthraquinone." *Ind. Eng. Chem. Research* 33,2,277(1994)
- 89 L. Oliva, M. Di Serio, N. Peduto, E. Santacesaria; "Chain propagation rate constants for gas phase polymerization of propene and 1-butene with Ziegler-Natta catalysts." *Macromol.Chem.Phys.* 195,211(1994)
- 88 E. Santacesaria; "Chimica Industriale, una Scienza applicata per una Società Moderna" *Diritto allo Studio* Febbraio 1993
- 87 F. Trulli, E. Santacesaria; "New sequestering builders for detergent formulations" *Chemistry Today* 5,11,(1993)

- 86 E. Santacesaria, M. Di Serio, R. Tesser, P. Triunfo; "An application of the UNIFAC-RKS method to a reactive system" *Fluid Phase Equilibria* 84,111,(1993)
- 85 E. Santacesaria, R.Tesser, G. Basile, M. Di Serio; "Isobaric Vapour Liquid Equilibria for Some Halogen Containing Ethanes in Binary Mixtures with HF". *Journal of Fluorine Chemistry* 61,123,(1993)
- 84 E. Santacesaria, M. Di Serio, G. Addino, R. Garaffa; Mechanisms of the Narrow Range Ethoxylation. 3RD CESIO, Proceedings, World Surfactant Congress, vol. 2, 281-290 (1992)
- 83 E. Santacesaria, M. Di Serio, R. Garaffa, G. Addino; "Kinetics and mechanisms of fatty alcohol polyethoxylation 2.Narrow-Range ethoxylation obtained with Barium Catalyst. *Ind. Eng. Chem. Research* 31,11,2419 (1992)
- 82 E. Santacesaria, M. Di Serio, R. Garaffa, G. Addino; "Kinetics and mechanisms of fatty alcohol Polyethoxylation. 1.The Reaction Catalyzed by Potassium Hydroxide" *Ind. Eng. Chem. Research* 31,11,2413 (1992)
- 81 M. Di Serio, R. Garaffa,E. Santacesaria; "Hydroformilation of Polyisobutene" *Journal Mol. Catalysis* 69,1,1(1991).
- 80 E. Santacesaria, R. Paludetto, L. Carvani; "Kinetics of Potassium Catalyzed Coal Char Gasification" *La Chimica e l'Industria* 73,343 (1991)
- 79 E. Santacesaria, M. Di Serio, P. Radici, L. Cavalli, R. Garaffa; "Kinetics and Mass Transfer in Polyethoxylation Reactions". *La Rivista Italiana delle Sostanze Grasse* 68,5,261 (1991)
- 78 E. Santacesaria, R. Tesser, M. Di Serio; "Simple and predictive approach for calculating the high pressure and temperature VLE of binary mixtures by applying a UNIFAC-EOS method". *Fluid Phase Equilibria* 63,329-340 (1991)
- 77 E. Santacesaria, D. Gelosa, M. Di Serio, R. Tesser; "Thermal Stability of Nonionic Polyoxyalkylene Surfactants". *Journal of Applied Polymer Science* 42,2053-2061(1991).
- 76 E. Santacesaria, D. Gelosa, M. Di Serio, P.- Ciambelli, S. Carrà "Catalytic alkylation of phenol with methanol: factors influencing activities and selectivities. Note II - Effect of intracrystalline diffusion and shape selectivity on H-ZSM5 zeolite". *Applied Catalysis*; 64, 101 (1990).
- 75 E. Santacesaria, D. Gelosa, D. Grasso, S. Carrà "Catalytic alkylation of phenol with methanol: factors influencing activities and selectivities. Note I - Effect of different acid sites evaluated by studying the behaviour of the catalysts:  $\gamma$ -Al<sub>2</sub>O<sub>3</sub>, Nafion-H, SiO<sub>2</sub>.Al<sub>2</sub>O<sub>3</sub>, H<sub>3</sub>PO<sub>4</sub>". *Applied Catalysis*; 64, 90 (1990).
- 74 E. Santacesaria, M. Di Serio, L. Lisi, D. Gelosa; "Kinetics of nonylphenol polyethoxylation catalyzed by potassium hydroxide". *Ind.Eng.Chem. Research* 29, 5,

- 719 (1990).
- 73 E. Santacesaria, M. Di Serio, D. Gelosa, S. Carrà; "Kinetics of methanol homologation. part II - Behaviour of cobalt-phosphine-iodine catalysts plus other metals as cocatalysts". *Journal of Molecular Catalysis*, 58, 43-52 (1990).
- 72 E. Santacesaria, M. Di Serio, D. Gelosa, S. Carrà; "Kinetics of methanol homologation. Part I- Behaviour of cobalt-phosphine-iodine catalysts". *Journal of Molecular Catalysis* 58, 27-42 (1990).
- 71 E. Santacesaria, M. Di Serio, G. Basile, S. Carrà; "Kinetics of chloroform fluorination by HF catalyzed by antimony pentachloride". *Journal of Fluorine Chemistry*, 44, 87-111 (1989).
- 70 E. Santacesaria, P. Wilkinson, P. Babini, S. Carrà; "Hydrogenation of 2-ethyltetrahydroanthraquinone in the presence of palladium catalyst". *Ind. Eng. Chem. Res.* 27, 780 (1988).
- 69 E. Santacesaria, R. Silvani, P. Wilkinson, S. Carrà; "Alkylation of p-Cresol with isobutene catalyzed by cation- exchange resins: a kinetic study". *Ind. Eng. Chem. Res.* 27, 541 (1988).
- 68 E. Santacesaria, R. Ferro, S. Ricci, S. Carrà; "Kinetic aspects in the oxidation of hydrogenated 2- ethyltetrahydroanthraquinone". *Ind. Eng. Chem. Res.* 26, 155 (1987).
- 67 E. Santacesaria, N. Pimpinelli; "Le ossidazioni in fase gas-liquido nell'industria". *La Chimica e l'Industria* 68, 718, (1986).
- 66 E. Santacesaria, M. Tonello, G. Storti, R. C. Pace, S. Carrà; "Kinetics of Titanium Dioxide Precipitation by Thermal Hydrolysis; *J. of Colloid and Interface Sci.* 111, 1,44 (1986)
- 65 E.Santacesaria; "L'Interfase gas-solido" Cap. 6 del volume *Chimica Fisica dei Colloidi e delle Interfasi* CLUP 1985
- 64 E. Santacesaria, M. Visca; *Chimica Fisica dei Colloidi e delle Interfasi* CLUP (1985)
- 63 E. Santacesaria, D. Gelosa E. Giorgi, S. Carrà; "Role of basic and acid sites in the bimolecular dehydration of alcohols catalyzed by HY zeolites". *Journal of Catalysis* 90, 1 (1984).
- 62 E. Santacesaria, S. Carrà, G. Storti, R. C. Pace; "Kinetics of titanium dioxide precipitation by thermal hydrolysis". VIII CHISA, International Congress of Chemical Engineering, 3- 7/9/1984, Praga, Cecoslovacchia.
- 61 E. Santacesaria, S. Carrà, R. Ferro; "The kinetics of the hydrogen peroxide industrial production". VIII CHISA, International Congress of Chemical Engineering, 3- 7/9/1984,

Praga, Cecoslovacchia

- 60 E. Santacesaria, E. Giorgi, D. Gelosa, S. Carrà; "The evaluation of acid-base properties of zeolites by employing simple reaction kinetics". IX Simposio Iberoamericano de Catalise, 16-21/7/1984, Lisbona, Portogallo.
- 59 G. Storti, E. Santacesaria, M. Morbidelli, S. Carrà; "Separation of xylenes on Y zeolites in vapor phase. Part 3: Choice of the suitable desorbent". Ind. Eng. Chem. Proc. Des. Dev. 24, 89 (1985).
- 58 M. Morbidelli, E. Santacesaria, G. Storti, S. Carrà "Separation of xylenes on Y zeolites in vapor phase. Part 2: Breakthrough and pulse curves and their interpretation". Ind. Eng. Chem. Proc. Des. Dev., 24, 83 (1985).
- 57 E. Santacesaria, D. Gelosa, P. Danise, S. Carrà; "Separation of xylenes on Y zeolites in vapor phase. Part 1: Determination of the adsorption equilibrium parameters and of kinetic regime". Ind. Eng. Chem. Proc. Des. Dev., 24, 83 (1985).
- 56 E. Santacesaria, D. Gelosa, D. Piconi, P. Danise; "The effect of the exchanged cations in the adsorption of p- and m-xylene onto Y zeolite". Journal of Colloid and Interface Sci., 98(2), 467 (1984).
- 55 E. Santacesaria, S. Carrà, F. Silva; "Acetic acid esterification catalyzed by mordenite". Journal of Catalysis, 85, 519-520 (1984).
- 54 E. Santacesaria, P. Danise, D. Gelosa; "The electrochemical and fluid dynamic behaviour of a continuous ozone analyzer". J. Electroanalytical Chem., 153, 175-183 (1983).
- 53 E. Santacesaria, D. Gelosa, P. Danise, S. Carrà; "Vapor-Phase Esterification Catalyzed by Decationized Y Zeolites". Journal of Catalysis, 80,427 (1983)
- 52 E. Santacesaria, S. Carrà; "Kinetics of catalytic steam reforming of methanol in a CSTR reactor". Applied Catalysis 5, 345-358 (1983).
- 51 E. Santacesaria, S. Carrà, R.C. Pace, C. Scotti; "Vapor-phase treatment of titanium dioxide with metal chlorides. Note 2: Kinetics of the reaction between titanium dioxide and aluminium chloride". Ind. Eng. Chem. Prod. Res. Dev., 21, 501-504 (1982).
- 50 E. Santacesaria, S. Carrà, R. C. Pace, C. Scotti; "Vapor-phase treatment of titanium dioxide with metal chlorides. Note 1: The reactions of coating performed by  $Al_2Cl_6$ ,  $SiCl_4$  and  $ZrCl_4$ , in the vapor phase". Ind. Eng. Chem. Prod. Res. Dev., 321, 496-500 (1982).
- 49 E. Santacesaria, P. Danise ; "Analizzatori continui per cloro residuo". Inquinamento, 7-8, 21 (1982).

- 48 M. Morbidelli, G. Niederjaufner, E. Santacesaria, S. Carrà "Modelli di simulazione di unità di purificazione di polimeri da impurezze volatili mediante solventi". *Ing. Chim. Ital.* 18, 45 (1982).
- 47 S. Carrà, E. Santacesaria, M. Morbidelli, G. Storti, D. Gelosa "Separation of xylenes on Y zeolites. Note 3: Pulse curves and their interpretation". *Ind. Eng. Chem. Proc. Des. Dev.*, 21, 451 (1982).
- 46 E. Santacesaria, M. Morbidelli, A. Servida, G. Storti, S. Carrà "Separation of xylenes on Y zeolites. Note 2: Breakthrough curves and their interpretation". *Ind. Eng. Chem. Proc. Des. Dev.*, 21, 446 (1982).
- 45 E. Santacesaria, M. Morbidelli, P. Danise, M. Mercenari, S. Carrà "Separation of xylenes of Y zeolites. Note 1: Determination of the adsorption equilibrium parameters, selectivities and mass transfer coefficients through finite bath experiments". *Ind. Eng. Chem. Proc. Des. Dev.*, 21, 440 (1982).
- 44 E. Santacesaria; "A rapid method for determining the amount and reactivity of surface hydroxy groups, applied to titanium dioxide". *Reaction Kinetics and Catalysis Letters*, 19, 49 (1982).
- 43 S. Carrà, M. Morbidelli, E. Santacesaria; "New approach to vapor-liquid equilibrium description through a perturbed hard-sphere equation of state". VII CHISA, International Congress of Chemical Engineering, 5/9/1981, Praga, Cecoslova
- 42 E. Santacesaria, P. Danise, C. Galli; "The electrochemical and fluid dynamical behaviour of amperometric residual chlorine analyzers". *Physico Chemical Hydrodynamics*, 2, 153 (1981).
- 41 S. Carrà, M. Morbidelli, E. Santacesaria, G. Niederjaufner; "Polymer purification through solvent addition: physical implications and modeling of separation units". *Journal of Applied Polymer Science*, 26, 1497 (1981).
- 40 E. Santacesaria, M. Morbidelli, S. Carrà; "Kinetics of the catalytic oxidation of methanol to formaldehyde". *Chemical Engineering Science*, 36, 909 (1981).
- 39 S. Carrà, E. Santacesaria; "Engineering aspects of gas-liquid catalytic reactions". *Cat. Rev. Sci. Eng.*, 22, 75 (1980).
- 38 E. Santacesaria, S. Carrà; "Aspetti chimico fisici nella preparazione di catalizzatori metallici". *La Rivista dei Combustibili*, Vol. XXXIV, 215 (1980).
- 37 S. Carrà, E. Santacesaria, P. Ferrario, P. Bovone; "Intermolecular forces and vapor-liquid equilibria: a semi-empirical approach". *Fluid Phase Equilibria*, 4, 89 (1980).
- 36 E. Santacesaria; "Metodi di separazione degli xileni isomeri". *La Chimica e l'Industria*, 62, 317 (1980).

- 35 S. Carrà, M. Morbidelli, E. Santacesaria, G. Buzzi "Synthesis of propylene oxide from propylene chlorohydrins. 2. Modeling of the distillation with chemical reaction unit". *Chemical Engineering Science*, 34, 1133 (1979).
- 34 S. Carrà, E. Santacesaria, M. Morbidelli, L. Cavalli; "Synthesis of propylene oxide from propylene chlorohydrins. Kinetic aspect of the process". *Chemical Engineering Science*, 34, 1123 (1979)
- 33 E. Santacesaria, D. Berlendis, S. Carrà; "Measurement of activity coefficients at infinite dilution by stripping and retention time methods". *Fluid Phase Equilibria*, 3, 167 (1979).
- 32 S. Carrà, E. Santacesaria, M. Morbidelli, P. Schwarz, C. Divo "Synthesis of epichlorohydrin by elimination of hydrogen chloride from chlorohydrins. 2. Simulation of the reaction unit". *Ind. Eng. Chem. Proc. Des. Dev.*, 18, 428 (1979).
- 31 S. Carrà, E. Santacesaria, M. Morbidelli, P. Schwarz, C. Divo; "Synthesis of epichlorohydrin by elimination of hydrogen chloride from chlorohydrins. 1. Kinetics aspects of the process". *Ind. Eng. Chem. Proc. Des. Dev.*, 18, 424 (1979).
- 30 E. Santacesaria, D. Gelosa, S. Carrà; "Role of gaseous treatments of platinum-alumina catalysts in n-hexane reactions. *La Chimica e l'Industria*, 61, 7-8, 529 (1979).
- 29 S. Carrà, M. Morbidelli, E. Santacesaria, "Distillation problems in the epoxides synthesis through dehydrochlorination". *Proceedings of the International Congress, Advances in Separation Science*, Sept. 18-21, Trieste, Italy (1978).
- 28 E. Santacesaria, A. Morini, S. Carrà; "Ammonium perchlorate decomposition in the presence of metallic oxides". *Combustion and Flame*, 31, 17 (1978).
- 27 E. Santacesaria, S. Carrà; "Cinetica dello steam reforming del metanolo". *La Rivista dei Combustibili*, Vol. XXXII, 227 (1978).
- 26 E. Santacesaria, D. Gelosa, S. Carrà, I. Adami; "Influence of metal dispersion on n-hexane reactions over platinum-alumina catalysts". *I&EC Product Research and Development*, 17, 68 (1978).
- 25 E. Santacesaria, C. Galli, S. Carrà; "Kinetic aspects of the impregnation of alumina pellets with hexachloroplatinic acid". *Reaction Kinetics and Catalysis Letters*, 6, 301 (1977).
- 24 A. Morini, E. Santacesaria; "Considerazioni sulla scelta dei materiali metallici per lo scambiatore primario nei cicli di potenza a fluido organico". *La Termotecnica*, 10, 490 (1977).
- 23 E. Santacesaria, D. Gelosa, S. Carrà; "Basic behavior of alumina in the presence of strong acids". *I&EC Product Research and Development*, 16, 45 (1977).

- 22 E. Santacesaria, S. Carrà, I. Adami; "Adsorption of hexachloroplatinic acid on gamma-alumina". I&EC Product Research and Development, 16, 41 (1977).
- 21 E. Santacesaria, C. Galli, S. Carrà; "Kinetics of hexachloroplatinic acid reduction". Reaction Kinetics and Catalysis Letters, 7, 361 (1977).
- 20 E. Santacesaria, P. Danise, S. Carrà; "Transformations of C6 hydrocarbons on Pt-Black". La Chimica e l'Industria, 58, 405 (1976).
- 19 E. Santacesaria, A. Morini; "Decomposizione catalitica di perclorato di ammonio". La Rivista dei Combustibili, XXX, 11-12, 328 (1976).
- 18 E. Santacesaria, S. Carrà; "Kinetics of ammonium perchlorate decomposition". Reaction Kinetics and Catalysis Letters, 5, 317 (1976).
- 17 E. Santacesaria, A. Morini, S. Carrà; "Thermal decomposition of ammonium perchlorate in the presence of cuprous and cupric oxides". La Chimica e l'Industria, 57, 515 (1975).
- 16 E. Santacesaria, A. Morini, S. Carrà; "Influence of metallic surfaces on decomposition of methylene chloride". La Termotecnica, XXIX, 443 (1975).
- 15 E. Santacesaria, D. Gelosa, S. Carrà; "Influence of catalyst pretreatment on n-hexane transformations on Platinum Black". Journal of Catalysis, 39, 403 (1975).
- 14 E. Santacesaria, D. Gelosa, S. Carrà; "Isomerization and hydrogenolysis of hexanes on Pt-Black". Reaction Kinetics and Catalysis Letters, 3, 215 (1975).
- 13 E. Santacesaria, A. Morini, S. Carrà; "Researches on thermal decomposition of methylene chloride". La Chimica e l'Industria, 56, 747 (1974).
- 12 E. Santacesaria; "Thermal decomposition of ammonium perchlorate in the presence of manganese dioxide". La Rivista dei Combustibili, Vol. XXVII, 10, 648 (1973)
- 11 E. Santacesaria, U. Ghezzi, G. Fusi; "Elaborazione di dati cinetici ottenuti mediante calorimetria differenziale (DSC)". La Rivista dei Combustibili, Vol. XXVI, 7-8, 267 (1972).
- 10 E. Santacesaria, D. Gelosa; "Idrazina monopropellente". XX Convegno Internazionale delle Comunicazioni - Genova 8-13 Ottobre 1972
- 9 E. Santacesaria, L. Giuffrè, G. Fusi; "Decomposizione termica del perclorato d'ammonio". La Rivista dei Combustibili, Vol. XXV, 9, 376 (1971)
- 8 C. Casci, E. Santacesaria, D. Gelosa; "Possibilità di impiego di molibdati ridotti nella decomposizione di idrazina monopropellente". La Rivista dei Combustibili, Vol. XXV, 9, 371 (1971).
- 7 E. Santacesaria, L. Giuffrè, D. Gelosa; "Cinetica della decomposizione di idrazina a bassa temperatura su molibdati ridotti". La Rivista dei Combustibili, Vol. XXV, 2, 62

- (1971).
- 6 E. Santacesaria, L. Giuffrè, D. Gelosa; "Decomposizione catalitica di idrazina ad opera di molibdati ridotti". La Rivista dei Combustibili, Vol. XXV, 1, 1 (1971).
  - 5 E. Santacesaria, L. Giuffrè, D. Gelosa; "Decomposizione catalitica dell'idrazina". La Rivista dei Combustibili, Vol. XXIV, 3, 101 (1970).
  - 4 L. Giuffrè, E. Santacesaria; "Dosaggio dell'acido  $\epsilon$ -ammino capronico e dell'  $\epsilon$ -caprolattame negli olii di lattame"; La Chimica e l'Industria, 51, 1341 (1969).
  - 3 E. Santacesaria, L. Giuffrè; "Studio sulle possibilità di caratterizzazione analitica dell'idrazina, dei suoi prodotti di decomposizione e delle impurezze. 2. Determinazione coulombometrica di ammoniaca e idrazina". La Rivista dei Combustibili, Vol. XXIII, 10, 490 (1969).
  - 2 E. Santacesaria, L. Giuffrè; "Studio sulle possibilità di caratterizzazione analitica dell'idrazina, dei suoi prodotti di decomposizione e delle impurezze. 1. Impiego della gas-cromatografia e sue possibilità di applicazione nel controllo di attività di catalizzatori di decomposizione dell'idrazina". La Rivista dei Combustibili, Vol. XXIII, 9, 438 (1969).
  - 1 E. Santacesaria; "Determinazione potenziografica dell'acqua in idrazina". La Chimica e l'Industria, 51, 282 (1969).



## List of Patents

- 24 Santacesaria Elio, Tesser Riccardo, Vitiello Rosa, Di Serio Martino; A new process for the production of di-chlorohydrins; It. Patent RM2013A000488; PCT/IT2014/000227
- 23 G. Carotenuto, M. Di Serio, E. Santacesaria, R. Tesser; New process for the production of ethylacetate and pure hydrogen from ethanol: Italian Patent NA2010A000009, 2010; WO2011/104738A2 assigned to EUROCHEM Engineering.
- 22 Santacesaria, Elio; Di Serio, Martino; Tesser, Riccardo; Turco, Rosa; Verde Domenico; Casale, Luca; (MYTHEN SpA) "Reactor for Immiscible Liquid Reagents". (MYTHEN SpA) PCT Int. Appl. (2010) WO 2010073216 (A1)
- 21 Santacesaria, Elio; Di Serio, Martino; Tesser, Riccardo. "Process for monochlorohydrins production from glycerol and hydrochloric acid" (EUROCHEM Engineering srl) PCT Int. Appl. (2008) WO 2008132770 A1 20081106
- 20 Vairo, Giuseppe; Di Serio, Martino; Santacesaria, Elio; Tesser, Riccardo; Cammarota, Francesco; Mandato, Nicola. "Process for the preparation of polyester polyols". (DOW Italia SpA) PCT Int. Appl. (2008), 24 pp. CODEN: PIXXD2 WO 2008037400 A1 20080403 CAN 148:403746 AN 2008:411839 CAPLUS
- 19 Siano, Dante; Di Serio, Martino; Tesser, Riccardo; Dimiccoli, Marinella; Cammarota, Francesco; Santacesaria, Elio; Siano, Luigi; Nastasi, Mario. "Process for the production of esters from vegetable oils or animal fats." (Aser S.r.l., Italy) PCT Int. Appl. (2006) WO 2006006033 A1 20060119
- 18 Siano, Dante; Nastasi, Mario; Santacesaria, Elio; Di Serio, Martino; Tesser, Riccardo; Guida, Maurizio. "Method for forming a packing for resin catalytic packed beds, and so formed packing." (Aser S.r.l., Italy) PCT Int. Appl. (2006), WO 2006046138 A1 20060504
- 17 Siano, Dante; Nastasi, Mario; Santacesaria, Elio; Di Serio, Martino; Tesser, Riccardo; Minutillo, Giuseppe; Ledda, Marianna; Tenore, Teresa. "Transesterification process for producing fatty acid esters from vegetable oils or animal fats using heterogeneous catalysts and aliphatic alcohols."; (Aser S.r.l., Italy) PCT Int. Appl. (2006), WO 2006050925 A1 20060518
- 16 Siano, Dante; Siano, Luigi; Nastasi, Mario; Santacesaria, Elio; Di Serio, Martino. "Method for producing esters from vegetable oils and animal fats by using heterogeneous catalysts." (Aser S.r.l., Italy). PCT Int. Appl. (2006), WO 2006094986 A1 20060914

- 15 Siano, Dante; Santacesaria, Elio; Fiandra, Valeria; Tesser, Riccardo; Di Nuzzi, Giovanni; Di Serio, Martino; Nastasi, Mario. "Continuous regioselective process for the production of 1,3-dichloro-2-propanol from glycerin and hydrochloric acid in the presence of organic carboxylic acid catalysts". (Aser S.r.l., Italy). PCT Int. Appl. (2006), WO 2006111810 A2 20061026
- 14 D. Siano, E. Santacesaria, V. Fiandra, R. Tesser, G. Di Nuzzi, M. Di Serio, M. Nastasi Processo per la produzione di alfa,gamma-dicloridrina da glicerina e acido cloridrico.. (ASER srl) Brevetto Italiano ITMI2005A000686. 2005
- 13 D. Siano, M. Nastasi, E. Santacesaria, M. Di Serio Processo per la produzione di esteri da oli vegetali o grassi animali con l'impiego di catalizzatori eterogenei. (ASER srl) Domanda di Brevetto Italiano ITMI2005A000361. 2005
- 12 D. Siano, M. Nastasi, E. Santacesaria, M. Di Serio, R. Tesser, G. Minutillo, M. Ledda, T. Tenore. Processo per la produzione di esteri da oli vegetali o grassi animali con l'impiego di catalizzatori eterogenei.. (ASER srl) Brevetto Italiano ITMI2004A002163. 2004
- 11 D. Siano, M. Nastasi, E. Santacesaria, M. Di Serio, R. Tesser, M. Guida. Procedimento per la realizzazione di un riempimento per letti catalitici impaccati costituiti da resine, e riempimento così realizzato.. (ASER srl) Brevetto Italiano ITMI2004A002056. 2004
- 10 D. Siano, M. Di Serio, R. Tesser, M. Dimiccoli, F. Cammarota, E. Santacesaria, L. Siano, M. Nastasi. Procedimento per la Produzione di esteri da oli vegetali o grassi animali.. (ASER srl) i Brevetto Italiano ITMI2004A001323. 2004
- 9 E. Santacesaria, M. Di Serio, R. Tesser, A. Ferrara; Processo per la produzione di polialchilen-tereftalati. Brevetto Italiano ITNA2003A000034. 2003
- 8 E. Santacesaria, R. Tesser, Di Serio M., Ambrosio M. Processo per la produzione di antrachinoni attraverso l'impiego di catalizzatori a base di poliossometallati. Brevetto Italiano ITRM20010701 - 2003-05-28
- 7 G. Brussani, E. Santacesaria, D. Gelosa "Agenti sequestranti del calcio a base di carboidrati ossidati e loro impiego come builder per detergenti" (FERTEC Srl) B.I. 67636A/90; EUR. PAT. 91113154.8
- 6 E. Santacesaria, F. Codignola, D. Gelosa, S. Carrà "Procedimento per la separazione di idrocarburi aromatici nei singoli componenti". (SISAS SpA) B.I. 21059A/82
- 5 S. Carrà, E. Santacesaria, M. Morbidelli, G. Niederjaufner "Procedimento per separare isomeri del monoclorotoluene in miscela tra loro ed isomeri così separati". (Caffaro SpA) B.I. 23840A/81
- 4 E. Santacesaria, S. Carrà, G. Caleffi, F. Codignola "Procedimento per la preparazione di acetato di etile" (SISAS SpA) Italian Patent 23795A/80

- 3 S. Carrà, E. Santacesaria, M. Morbidelli, F. Codignola, L. Di Fiore "Process for the separation of meta-xylene from mixtures of aromatic hydrocabrons" (SISAS SpA) B.I. 24044A/80; Eur. Pat. 811106176.1; US Pat. 4,368,347
- 2 C. Scotti, R.C. Pace, S. Carrà, E. Santacesaria "Process for the post-treatment of titanium oxide". (Montedison SpA) Eur. Pat. 799P42368
- 1 C. Scotti, R.C. Pace, S. Carrà, E. Santacesaria "Post treated Titanium Dioxide, a process for obtaining the same, and a process for preparing a titanium dioxide pigment". (Montedison SpA) Eur. Pat. 799P41367; US Pat. 4,374,675