# Fausto CROCE

Full Professor of Physical-Chemistry and Electrochemistry
Department of Pharmacy
University 'G.D'Annunzio'
Chieti - Italy

- 1) Short Curriculum;
- 2) Teaching activities;

# Curriculum Sintetico

Fausto Croce è nato il

Attualmente, è in servizio presso il "Dipartimento di Farmacia" dell'Università "G.d'Annunzio" di Chieti (Italia) nel ruolo di professore ordinario di Chimica Fisica ed Elettrochimica. Ha lavorato per quindici anni come ricercatore presso il Dipartimento di Chimica dell'Università "La Sapienza" di Roma (Italia) e per otto anni presso il laboratorio di Chimica-Fisica del Dipartimento dei Materiali dell'ENEA (Ente Nazionale Energie Alternative). I suoi interessi di ricerca riguardano l'elettrochimica a stato solido, le batterie ad alte prestazioni, le celle a combustibile, i dispositivi elettrochimici come sensori e attuatori, la chimica fisica delle soluzioni elettrolitiche non acquose e l'elettrochimica dei polimeri. È stato Visiting Scientist in vari laboratori di ricerca internazionali e tra questi l'Army Research Lab. (NJ-USA), il MaxPower Research Lab. (Phil.-USA), l'Osaka National Research Institute (ONRI-Osaka, Giappone). È stato Visiting Professor al CUNY (New York, USA), alla Waseda University (Tokyo, Giappone), all'Università della Florida (Gainesville, USA) e all'Università Hanyang (Seoul, Corea del Sud). È autore e co-autore di 151 pubblicazioni scientifiche e di 5 brevetti. È revisore ufficiale di numerose riviste scientifiche internazionali nei settori dell'Elettrochimica e della Chimica-Fisica. È stato responsabile di numerosi progetti di ricerca nazionali e internazionali nel campo delle batterie al litio come Prin, EU FP7, US Army, ecc. Nel marzo 2018 è stato nominato 'Membro Emerito' dell'ECS (The Electrochemical Society-USA). Nell'anno 2015 ha svolto il ruolo di " Valutatore Esperto Esterno" per la Commissione Europea (Agenzia Esecutiva per la Ricerca) nella valutazione delle proposte FET (Future Emerging Technologies). Negli anni 2016 e 2017 ha ricoperto il ruolo di VICE-CHAIR del Panel of Evaluators di EC-REA (COMMISSIONE EUROPEA-Agenzia Esecutiva per la Ricerca), per la valutazione del Bando HORIZON 2020 FET (Future and Emerging Technologies) OPEN 1-2016- 2017 RIA (Azione per la ricerca e l'innovazione).

È incluso, con ranking 39, nell'elenco TIS (Top Italian Scientists) (<a href="http://www.topitalianscientists.org/TIS\_HTML/Top\_Italian\_Scientists\_Chemistry.htm">http://www.topitalianscientists.org/TIS\_HTML/Top\_Italian\_Scientists\_Chemistry.htm</a>).

Le metriche di Google Scholar sono (https://scholar.google.it/citations?user=-4WrPW4AAAAJ&hl=it):

Indice H complessivo: 53;
 Citazioni generali: 12989;
 Citazioni dal 2014: 4903;
 Indice H dal 2014: 34;
 Indice globale i10: 109;
 Indice i10 dal 2014: 76.

Mentre le metriche di Scopus sono (https://www.scopus.com/authid/detail.uri?authorId=55538444500):

- Indice H complessivo:

48;

- Citazioni generali:

10499.

ID SCOPUS ID: 55538444500

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# Short Curriculum

Fausto Croce was born on

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presently joins the 'Dipartimento di Farmacia' of the University 'G.d'Annunzio' of Chieti (Italy) holding a permanent position as Full Professor in Physical-Chemistry and Electrochemistry. He formerly served for fifteen years as Researcher in the Department of Chemistry of the University 'La Sapienza' of Roma (Italy) and for eight years in the Physical-Chemistry Lab of the materials department of ENEA (National Institute for alternative Energy). His research interests are in the field of solid-state electrochemistry, high performances batteries, fuel cells, electrochemical devices as sensors and actuators, physicalchemistry of non aqueous electrolyte solutions and polymer electrochemistry. He has been Visiting Scientist in various international research laboratories and between them the Army Research Lab. (NJ-USA), the MaxPower Research Lab. (Phil.-USA), the Osaka National research Institute (ONRI-Osaka, Japan). He has been Visiting Professor at the CUNY (New York, USA), the Waseda University (Tokyo, Japan), the University of Florida (Gainesville, USA) and the Hanyang University (Seoul, South Korea). He has authored and co-authored 151 scientific publications and 5 patents. He is an official reviewer of many international scientific journals in the fields of Electrochemistry and Physical-Chemistry. He has been responsible of many national and international research grants in the field of lithium batteries such as Italian Prin, EU FP7, US Army, etc.

On March 2018 he has been nominated 'Member Emeritus' of the ECS (The Electrochemical Society-USA).

In the year 2015 he has acted as 'External Expert Evaluator' for EC-REA (European Commission - Research Executive Agency) in the evaluation of FET (Future Emerging Technologies) proposals.

In the years 2016 and 2017 he has acted as VICE-CHAIR of the Panel of Evaluators of EC-REA (EUROPEAN COMMISSION - Research Executive Agency), for the evaluation of HORIZON 2020 FET (Future and Emerging Technologies) OPEN Call 1-2016-2017 RIA (Research and Innovation Action).

He is included, with rank 39, in the TIS (Top Italian Scientists) list (http://www.topitalianscientists.org/TIS\_HTML/Top\_Italian\_Scientists\_Chemist ry.htm)

Google Scholar metrics are

(<a href="https://scholar.google.it/citations?user=-4WrPW4AAAAJ&hl=it">https://scholar.google.it/citations?user=-4WrPW4AAAAJ&hl=it</a>):

- Overall H index:

53;

- Overall citations:

12989;

- Citations since 2014:

4903:

- H index since 2014:

34:

- Overall i10 index:

**109**;

- i10 index since 2014:

**76**.

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Scopus

metrics

are

(https://www.scopus.com/authid/detail.uri?authorId=55538444500):

- Overall H index:

**48**;

- Overall citations:

10499.

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# Teaching and lecturing activity

Fausto Croce has taught in Italy since 1989 in different Universities: namely the University of Roma, the University of Camerino and the University of Chieti. Hereafter are reported in details, for each year, both the teaching courses held and the lecturing activity.

# A.A. (Academic year) 1989-90

- 1) Assistant professor to the 'Laboratory of Physical-Chemistry' for the students of Chemistry and Industrial Chemistry degree of the University of Roma;
- 2) A series of lectures for the students of Electrochemistry , degree in Industrial Chemistry of the University of Roma, entitled:
- 3 Theoretical principles and application in electrochemistry of the EIS (Electrochemical Impedance Spectroscopy):
- 4 Energy production by Fuel Cells: functioning principles.

# A.A 1990-91

- 1) Assistant professor to the 'Laboratory of Physical-Chemistry' for the students of Chemistry and Industrial Chemistry degree of the University of Roma;
- 2) Teacher of the Course of 'Electrical Measurements' for the students of Chemistry and Industrial Chemistry degree of the University of Roma

#### A.A 1991-92

- 1) Assistant professor to the 'Laboratory of Physical-Chemistry' for the students of Chemistry and Industrial Chemistry degree of the University of Roma;
- 2) Teacher of the Course of 'Physical-Chemistry' for the students of Chemistry and Pharmaceutical Technologies degree of the University of Chieti.

## A.A 1993-94

1) Assistant professor to the 'Laboratory of Physical-Chemistry' for the students of the Chemistry and Industrial Chemistry degree of the University of Roma.

# A.A 1994-95

1) Assistant professor to the 'Laboratory of Physical-Chemistry' for the students of

Chemistry and Industrial Chemistry degree of the University of Roma.

2) Teacher of the Course of 'Laboratory of Inorganic and General Chemistry' for the students of Industrial Chemistry degree of the University of Roma.

# A.A 1995-96

- 1) Assistant professor to the 'Laboratory of Physical-Chemistry' for the students of Chemistry and Industrial Chemistry degree of the University of Roma.
- 2) Teacher of the Course of 'Laboratory of Inorganic and General Chemistry' for the students of Industrial Chemistry degree of the University of Roma
- 3) Teacher of the Course of 'Physical-Chemistry for the students of 'Geological Sciences' degree of the University of Roma.

## A.A 1996-97

- 1) Teacher of the Course of 'Electrochemistry' for the students of the Chemistry degree of the University of Camerino;
- 2) Teacher of the Course of 'Laboratory of Physical-Chemistry' for the students of the Chemistry degree of the University of Roma.

#### A.A 1997-98

- 1) Teacher of the Course of 'Electrochemistry' for the students of the Chemistry degree of the University of Camerino;
- 2) Teacher of the Course of 'Analytical Chemistry' the students of Chemistry and Pharmaceutical Technologies degree of the University of Chieti.

# A.A 1998-99

- 1) Teacher of the Course of 'Electrochemistry' for the students of the Chemistry degree of the University of Camerino;
- 3) Teacher of the Course of 'Analytical Chemistry' the students of Chemistry and Pharmaceutical Technologies degree of the University of Chieti.

#### A.A 1999-00

- 1) Teacher of the Course of 'Physical-Chemistry' for the students of Chemistry and Pharmaceutical Technologies degree of the University of Chieti;
- 2) Teacher of the Course of 'Electrochemistry' for the students of the Chemistry degree of the University of Camerino;

## A.A 2000-01

- 1) Teacher of the Course of 'Physical-Chemistry' for the students of Chemistry and Pharmaceutical Technologies degree of the University of Chieti;
  - 2) Teacher of the Course of 'Physical-Chemistry of Electrolytes' of the Chemistry degree of the University of Roma.

# A.A 2001-02

- 1) Teacher of the Course of 'Physical-Chemistry' for the students of Chemistry and Pharmaceutical Technologies degree of the University of Chieti;
- 2) Teacher of the Course of 'Physical-Chemistry of Electrolytes' of the Chemistry degree of the University of Roma.

#### A.A 2002-03

- 1) Teacher of the Course of 'Physical-Chemistry' for the students of Chemistry and Pharmaceutical Technologies degree of the University of Chieti;
- 2) Teacher of the Course of 'Physical-Chemistry of Electrolytes' of the Chemistry degree of the University of Roma.

# **A.A 2003 - till today**

Teacher of the Course of 'Physical-Chemistry' for the students of Chemistry and Pharmaceutical Technologies degree of the University of Chieti;

Fausto Croce has, moreover, lectured PhD students in Chemistry with monographic courses on:

- Computer Chemistry;
- Application of the EIS to corrosion phenomena.

He has assisted many students for the preparation of the experimental thesis in Chemistry, Industrial Chemistry and Chemistry and Pharmaceutical Technologies.