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WORK EXPERIENCE

1) *Dates*: from: 11 / 1993 to: ongoing (02/2020)
Occupation Category : Science / Research in Controlled Fusion
Name and address of employer : ENEA - C.R. Frascati, via E. Fermi, 45 - 00044 Frascati (Roma) Italy
Type of business or sector : Research in Fusion Plasma, Tokamak operations & design
Occupation or position held :Nuclear Engineer
Main activities and responsibilities :
- PTTT WPSAE Project Leader
- PTTT WPSAE accident analyses (task coordinator), WCLL studies for chemical reaction investigation (principal investigator), safety codes critical collection (p. investigator).
- PTTT WPJET3 NSAF collection of ORE data in JET (p. investigator)
- PTTT ENS accident analyses and ORE assessment (p. investigator)
- ITER deterministic safety analysis for EFDA and ITER tasks (principal investigator)
- ITER ORE and ALARA assessment for EFDA (principal investigator)and ITER task (contractor)
- Fire risk analysis for EFDA and ITER tasks (principal investigator)
- PPCS deterministic safety analysis for EFDA tasks (principal investigator)
- EU TBM safety analysis (task coordinator)
- Experimental campaigns for dust mobilization in LOVA conditions for EFDA tasks (principal investigator)
- JET occupational safety analysis and ALARA assessment for EFDA tasks (principal investigator)
- IFMIF deterministic safety analysis (principal investigator)
- IGNITOR safety assessment
- Validation of codes for safety assessment in nuclear fusion plants for EFDA (principal investigator)

2) *Dates*: from: 07 / 1983 to: 011/ 1993
Occupation Category : Science / Environmental
Name and address of employer :ENEA - C.R. Casaccia, via Anguillarese 301 00100 Roma, Italy
Type of business or sector : Research in Solar Energy and Energy Saving
Occupation or position held :Engineer
Main activities and responsibilities :
- Studies for solar energy applications in historical buildings
- Analysis and recovery of energy consumption in public buildings (museums, schools, etc)
- Design of low energy consumption buildings
- Indoor pollution studies for HVAC optimization
- Validation of codes for energy saving assessment

3) *Dates*: from: 06 / 1982 to: 06/ 1983
Occupation Category : Science / Environmental
Name and address of employer :ENEA - C.R. Casaccia, via Anguillarese 301 00100 Roma, Italy
Type of business or sector : Research in Energy Saving
Occupation or position held :Consultant Engineer

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Main activities and responsibilities :
- Energy saving in small and medium industries

4) *Dates*: from: 10 / 1980 to: 08 / 1982
Occupation Category : Environmental
Name and address of employer : Università degli studi di Roma "La Sapienza" - Via Eudossiana 18, 00184 Roma, Italia
Type of business or sector : Research in Energy Saving
Occupation or position held :Engineer
Main activities and responsibilities :
- Analysis of energy consumptions in civil buildings

EDUCATION AND TRAINING

1) *Dates*: from 10 / 1967 to 07 / 1972
Education Type: Lycee
Name, address and type of organisation providing education and training:
LICEO SCIENTIFICO STATALE "Galileo Galilei", 63100 Macerata, ITALY
Principal subjects/occupational skills covered: Scientific subjects
Title of qualification awarded: Diploma di maturità scientifica

2) *Dates*: from 11 / 1972 to: 07 / 1980
Education Type: Engineering
Name, address and type of organisation providing education and training:
Università degli studi di Roma "La Sapienza" - Via Eudossiana 18, 00184 Roma, Italia
Principal subjects/occupational skills covered: Nuclear engineering
Title of qualification awarded: Nuclear Engineering degree

LANGUAGES

1) Mother tongue: Italian
2) Other languages: English (spoken: good, written: good, read: good) and French (spoken: low, written: low, read: good).

Publications

Year	Authors	Title	Journal
1994	M.T. Porfiri, R. Caporali, S. Ciattaglia, G. Cambi	ITER LOCA Sequences: Probabilistic Safety Assessment	Fusion Technology 1994, Proceedings of 18th SOFT
1995	C. Rizzello, T. Pinna, M.T. Porfiri	Ozone Hazard in the ITER Cryostat	Fusion Engineering, 1995., 15th IEEE/NPSS SOFE
1995	G. Cambi, D. G. Cepraga, L. Di Pace, M. T. Porfiri	Environment source terms for ex-vessel FW/SB LOCA accident sequences in ITER EDA	Fusion Engineering, 1995, 15th IEEE/NPSS SOFE
1997	G. Cambi, L. Di Pace, D. G. Cepraga, M.T. Porfiri	ITER Environmental Source Term Assessment for some Reference Accident Sequences	Fusion Engineering, 1997, Vol. 1, pp. 141-144,
1997	Topilski, L.N, Merrill, B.J. Porfiri, M.T. et al.	Validation and verification of ITER safety computer codes	Fusion Engineering, 1997, pag. 188-191 vol.1
1998	Caporali R.; Caruso G.; Di Pace L.; Franzoni G.; Porfiri M.T., Remington T. L.	Cryostat pressurization in ITER during an ex-vessel loss of coolant accident sequence	Fusion Engineering and Design, Volume 38, Number 3, January 1998 , pp. 343-351(9)
1998	C. Nardi, M. Futterer, F. Lucca, A. Palmieri, T. Pinna, M.T. Porfiri et al.	The thermo-mechanical design of the water cooled Pb-17Li Test Blanket Module for ITER	Fusion Technology - SOFT98, Marsiglia, France, 7-11/09/98
1998	G. Cambi, M.T. Porfiri, H. Jahn, D.G. Cepraga, H.-W.	ITER divertor heat transfer system and loss of vacuum accident sequence analyses overview	Fusion Engineering and Design 42 (1998) 95–101

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	Bartels		
1998	H.-W. Bartels, A. Poucet, G. Cambi, M.T. Porfiri et al.	ITER reference accidents	Fusion Engineering and Design 42 (1998) 13–19
1999	S. Paci, T. Pinna, M.T. Porfiri	Analysis of the ICE experimental tests using the ECART code	Ninth meeting on nuclear reactor thermal hydraulics (NURETH 1999)
1999	N.P. Taylor, H-W. Bartels, G. Cambi, D.G. Cepraga, R.A. Forrest, et al.	Experimental validation of calculations of decay heat induced by 14 MeV neutron activation of ITER materials	Fusion Engineering and Design 45 (1999) 75–88
2000	M.T. Porfiri, G. Cambi	Integrated safety analysis code system (ISAS) application for accident sequence analyses	Fusion Engineering and Design 51–52 (2000) 587–591
2001	L.N.Topilski, X. Masson, M. T. Porfiri, T. Pinna et al.	Validation and benchmarking in support of ITER-FEAT analysis	Fusion Engineering and Design 54 (2001) 627–633
2001	P.Sardain, C.Girard, J.Anderson, M.T. Porfiri, R.Kurihara, et al.	Modelling of two phase flow under accidental conditions fusion codes benchmark	Fusion Engineering and Design 54 (2001) 555–561
2001	R. Caporali, G. Caruso, L. Di Pace, G. Franzoni, M.T. Porfiri	Cryostat pressurization in ITER during an ex-vessel loss of coolant accident sequence	Fusion Engineering and Design 38 (1998) 343–351
2001	E. Kajlert, T. Boubee de Gramont, W. Gulden, M.-T. Porfiri	Application of the integrated safety analysis code system (ISAS) for ITER	Fusion Engineering and Design 58–59 (2001) 1047–1051
2002	G. Cambi, P. Melono, M. T. Porfiri	Influence of the break location in the loss of coolant accident analyses for the ITER divertor cooling loop	Fusion Engineering and Design 63–64 (2002) 187–192
2002	M. T. Porfiri, P. Meloni	Post-test calculations with ISAS-ITER system for ICE experiments	Fusion Engineering and Design (2002) 48-51
2002	T. Marshall, M.T. Porfiri, L. Topilski, B. Merrill	Fusion safety codes: international modeling with MELCOR and ATHENA /INTRA	Fusion Engineering and Design 63 /64 (2002) 243 /249
2003	G. Cambi, S. Paci, F. Parozzi, M.T. Porfiri	Ex-vessel break in ITER divertor cooling loop analysis with the ECART code	Fusion Engineering and Design 69 (2003) 601 /605
2005	A. Natalizio, M.T. Porfiri, B. Patel	Collection and analysis of Occupational Radiation Exposure data from the JET Tokamak	Fusion Engineering and Design 75–79 (2005) 1193–1197
2005	S. Paci, N. Forgione, F. Parozzi, M.T. Porfiri	Bases for dust mobilization modelling in the light of STARDUST experiments	Nuclear Engineering and Design 235 (2005) 1129–1138
2005	S. Paci, F. Parozzi, M.T. Porfiri	Validation of the ECART code for the safety analysis of fusion reactors	Fusion Engineering and Design 75–79 (2005) 1243–1246
2005	F. Lignini, J. Uzan-Elbez, J.P. Girard, M.T. Porfiri, L.Rodrıguez-Rodrigo et al.	Fire risk analysis in ITER tritium building	Fusion Engineering and Design 75–79 (2005) 1097–1102
2005	J. Uzan-Elbez, L. Rodrıguez-Rodrigo, M.T. Porfiri, N. Taylor, C. Gordon et al.	ALARA applied to ITER design and operation	Fusion Engineering and Design 75–79 (2005) 1085–1089
2005	P. Sardain, L. Ayrault, B. Merrill, M.T. Porfiri, G. Caruso et al.	The EVITA programme: Experimental and numerical simulation of a fluid ingress in the cryostat of a water-cooled fusion reactor	Fusion Engineering and Design 75–79 (2005) 1265–1269
2006	M. T. Porfiri, T. Pinna	ORE assessment in ITER: a proposal for the methodology approach and an example of application	IAEA Fusion Energy Conference 2006
2006	S. Paci, M.T. Porfiri	Analysis of an ex-vessel break in the ITER divertor cooling loop	Fusion Engineering and Design 81 (2006) 2115–2126
2007	H. Maubert , T. Pinna , M.T. Porfiri	Radiological protection in ITER	June 19-21 6th National Congress of the SFRP, Reims
2008	W. Gulden, A. Bengaouer, B. Brañas, W. Breitung, M. T. Porfiri, L. Rodriguez-Rodrigo et al.	European contribution to the ITER licensing	18th ANS Topical Meeting on the Technology of Fusion Energy (TOFE)
2008	S. Paci, M.T. Porfiri	Experimental and numerical analysis of the air inflow technique for dust removal from the vacuum vessel of a tokamak machine	Fusion Engineering and Design 83 (2008) 151–157
2010	T. Pinna, L.C. Cadwallader, G. Cambi, S. Ciattaglia, S. Knipe, M.T. Porfiri et al.	Operating experiences from existing fusion facilities in view of ITER safety and reliability	Fusion Engineering and Design 85 (2010) 1410–1415
2011	F. Le Guern,W. Gulden, S. Ciattaglia, M.T. Porfiri et al.	F4E R&D programme and results on in-vessel dust and tritium	Fusion Engineering and Design 86 (2011) 2753–2757
2011	C. Bellecci, P. Gaudio, I. Lupelli, A. Malizia, M.T. Porfiri et al.	Validation of a loss of vacuum accident (LOVA) Computational Fluid Dynamics (CFD) model	Fusion Engineering and Design 86 (2011) 2774–2778

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2011	C. Bellecci, P. Gaudio, I. Lupelli, A. Malizia, M.T. Porfiri et al.	Loss of vacuum accident (LOVA): Comparison of computational fluid dynamics (CFD) flow velocities against experimental data for the model validation	Fusion Engineering and Design 86 (2011) 330–340
2013	G. Miccichè, M. T. Porfiri, et al.	The European contribution to the development and validation activities for the design of IFMIF lithium facility	Fusion Engineering and Design 88 (2013) 791–795
2013	Miriam Benedetti, Pasquale Gaudio, Ivan Lupelli, Andrea Malizia, Maria Teresa Porfiri, Maria Richetta	Large eddy simulation of Loss of Vacuum Accident in STARDUST facility	Fusion Engineering and Design 88 (2013) 2665– 2668
2013	G. Caruso, F. Giannetti, M. T. Porfiri	Modeling of a confinement bypass accident with CONSEN, a fast-running code for safety analyses in fusion reactors	Fusion Engineering and Design 88 (2013) 3263– 3271
2013	Editors: S. Tosti, N. Ghirelli. Authors: M. T. Porfiri et al.	Tritium in fusion – Production, Uses and Environmental Impact	ISBN:978-1-62417-278-8
2014	N. Taylor, B. Merrill, L. Cadwallader, L. Di Pace, M.T. Porfiri et al.	Materials-related issues in the safety and licensing of nuclear fusion facilities	Nuclear Fusion (submitted)
2015	G. Caruso, M. T. Porfiri	ICE layer growth on a cryogenic surface in a fusion reactor during a loss of water event	Progress in Nuclear Energy 78 (2015) 173-181
2015	G. Caruso, M. T. Porfiri et al.	Numerical study on Ingress of Coolant Event experiments with CONSEN code	Fusion Engineering and Design, Volume 100, November 2015, Pages 443-452
2017	T. Pinna, M. T. Porfiri et al.	Identification of accident sequences for the DEMO plant	Fusion Engineering and Design, https://doi.org/10.1016/j.fusengdes.2017.02.026
2017	J. H. You, G. Mazzone, M. T. Porfiri et al.	Progress in the initial design activities for the European DEMO divertor: Subproject "Cassette"	Fusion Engineering and Design, https://doi.org/10.1016/j.fusengdes.2017.03.018
2017	G. Mazzone, M. T. Porfiri et al.	Choice of a low operating temperature for the DEMO EUROFER97 divertor cassette	Fusion Engineering and Design, https://doi.org/10.1016/j.fusengdes.2017.02.013
2017	G. Mazzini, T. Kaliatka, M.T. Porfiri et al.	Methodology of the source term estimation for DEMO reactor	Fusion Engineering and Design, https://doi.org/10.1016/j.fusengdes.2017.04.101
2017	F. Tieri, F. Cousin, L. Chailan, M. T. Porfiri	ASTEC simulations of dust resuspension in fusion containments compared with the "STARDUST" experimental data	Fusion Engineering and Design, https://doi.org/10.1016/j.fusengdes.2017.01.045
2017	M. Eboli, A. Del Nevo, N. Forgione, M. T. Porfiri	Post-test analyses of LIFUS5 Test#3 experiment	Fusion Engineering and Design, https://doi.org/10.1016/j.fusengdes.2017.03.046
2017	D. Dongiovanni, M. T. Porfiri, S. Ciattaglia	Parametric explorative study of DEMO galleries pressurization in case of ex-vessel LOCA	Fusion Engineering and Design, https://doi.org/10.1016/j.fusengdes.2017.03.120
2017	N. Taylor, B. Merrill, L. Cadwallader, L. Di Pace, L. El-Guebaly, P. Humrickhouse, D. Panayotov, T. Pinna, M.-T. Porfiri, S. Reyes, M. Shimada and S. Willms	Materials-related issues in the safety and licensing of nuclear fusion facilities	Nucl. Fusion 57 (2017) 092003
2018	Darryl Campling, Peter Macheta, James Moran, Maria Teresa Porfiri, JET Contributors1	JET work effort data collection for ITER ORE optimization	Fusion Engineering and Design, Volume 146, Part A, September 2019, Pages 69-73
2018	Guido Mazzini, Tadas Kaliatka, Maria Teresa Porfiri	Estimation of Tritium and Dust Source Term in European DEMOnstration Fusion Reactor During Accident Scenarios	ASME J of Nuclear Rad Sci. Jul 2019, 5(3): 030916 (7 pages)
2019	Guido Mazzini, Tadas Kaliatka, Maria Teresa Porfiri	Tritium and dust source term inventory evaluation issues in the European DEMO reactor concepts	Fusion Engineering and Design 146 (2019) 510–513
2019	Sandro Pacia,, Bruno Gonfiotti, Daniele Martelli, Maria Teresa Porfiri	ECART analysis of the STARDUST dust resuspension tests with an obstacle presence	Fusion Engineering and Design 146 (2019) 2–5
2019	Marica Eboli, Samad Khani Moghanaki, Daniele Martelli, Nicola Forgione, Maria Teresa Porfiri, Alessandro Del Nevo	Experimental activities for in-box LOCA of WCLL BB in LIFUS5/Mod3 facility	Fusion Engineering and Design 146 (2019) 914–919
2019	Matteo D'Onorio, Fabio Giannetti, Gianfranco Caruso, Maria Teresa Porfiri	In-box LOCA accident analysis for the European DEMO water-cooled reactor	Fusion Engineering and Design Volume 146, Part A, September 2019, Pages 732-735
2019	Neill Taylora, Sergio Ciattaglia, Dave Coombs, Xue Zhou Jin, Jane Johnston, Karine Liger, Guido Mazzini, Juan Carlos Mora, Tonio Pinna, Maria Teresa Porfiri, Egidijus Urbonavicius,	Safety and environment studies for a European DEMO design concept	Fusion Engineering and Design 146 (2019) 111–114

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	Robert Vale, Anna Widdowson		
2019	Francisco Martín-Fuertes, Miguel E. García, Pedro Fernández, Ángela Cortés, Gianluca D'Ovidio, Elena Fernández, Tonio Pinna, Maria Teresa Porfiri, Ulrich Fischer, Francisco Ogando, Fernando Mota, Yuefeng Qiu, Atte Helminen, Slawomir Potempski, Eduardo Gallego and Ángel Ibarra	Integration of Safety in IFMIF-DONES Design	Safety 2019, 5, 74; doi:10.3390/safety5040074

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