

# Liste des Publications de Belkacem OULD BOUAMAMA

---

## **Politique de Publications**

Les résultats de recherche sont publiés ou co-publiés (avec mes doctorants, Post Doctorants et membres de l'équipe) dans des revues ciblées de rang A avec facteur d'impact, et dans des congrès internationaux reconnus par la section 61 de type (IFAC, ECC, CDC, IEEE..). Des publications dans des ouvrages reconnus avec comité de lecture tel que Springer sont aussi visées pour une reconnaissance internationale plus large.

## **Sommaire**

---

- 1) Ouvrages de synthèse et chapitres d'ouvrages
- 2) Revues de rang a
- 3) Conférences internationales
- 4) conférences plénières
- 5) Rapports de fin de contrats industriels
- 6) Publications pédagogiques

## Liste Publications B. Ould Bouamama

### OUVRAGES DE SYTHESE ET CHAPITRES D'OUVRAGES

- Mayank Shekhar JHA, Geneviève Dauphin-Tanguy, and B S Ould-Bouamama. Particle Filter based Integrated Health Monitoring in Bond Graph Framework. In *Bond Graphs for Modelling, Control and Fault Diagnosis of Engineering Systems*. January 2017. URL <https://hal.archives-ouvertes.fr/hal-01449930>.
- Belkacem Ould Bouamama, Nizar Chatti, and Anne-Lise Gehin. SBG for Health Monitoring of Fuel Cell System. In *Renewable Energy: Generation and Applications - Springer Proceedings in Energy*. Springer, Cham. July 2014. URL <https://hal.archives-ouvertes.fr/hal-01727722>.
- Rui Loureiro, Rochdi Merzouki, and Belkacem Ould-Bouamama. Structural Recon gurability Analysis for an Over-Actuated Electric Vehicle. In *Mechatronic & Innovative Applications*, pages 127–146. Bentham science, September 2012. URL <https://hal.archives-ouvertes.fr/hal-00749171>.
- Nizar Chatti, Anne-Lise Gehin, and Belkacem Ould Bouamama. Robust Fault Decision: Application to an Omni Directional Mobile Robot. In *Mechatronic & Innovative Applications*, pages 147–167. Bentham Science, June 2012. URL <https://hal.archives-ouvertes.fr/hal-00730185>.
- Samir Benmoussa, Rochdi Merzouki, and Belkacem Ould Bouamama. Bond Graph Model-Based Fault detection and Isolation: Application to Intelligent Autonomous Vehicle. In *Mechatronic & Innovative Applications*, pages 111–126. Bentham Science, 2012. doi: 10.2174/97816080544111120101. URL <https://hal.archives-ouvertes.fr/hal-00757885>.
- Youcef Touati, Rochdi Merzouki, and Belkacem Ould Bouamama. Robust Monitoring of an Omnidirectionnal Mobile Robot. In ROCHDI MERZOUKI, editor, *Mechatronic & Innovative Applications*, pages 111–126. BENTHAM SCIENCE, 2012. URL <https://hal.archives-ouvertes.fr/hal-00747478>.
- Mohand Arab Djeziri, Belkacem Ould Bouamama, Geneviève Dauphin-Tanguy, and Rochdi Merzouki. LFT Bond Graph Model-Based Robust Fault Detection and Isolation. In *Bond Graph Modelling of Engineering Systems*, pages 105–133. springer, 2011. doi: 10.1007/978-1-4419-9368-7\_3. URL <https://hal.archives-ouvertes.fr/hal-00757961>.
- Belkacem Ould Bouamama. Diagnostic en ligne à base de modèle Bond graph. In *REE Revue de l'Electricité et de l'Electronique*, 2, pages 111–117. Dossier " Méthodologie bond graph pour la conception intégrée de systèmes multi physiques " sous la coordination de G. DAUPHIN-TANGUY, 2010. URL <https://hal.archives-ouvertes.fr/hal-00757988>.
- Belkacem Ould Bouamama. Conception intégrée des systèmes de supervision industrielle . Approche bond graph. In *REE Revue de l'Electricité et de l'Electronique*, 4, pages 55–59. REE Revue de l'Electricité et de l'Electronique, 2009. URL <https://hal.archives-ouvertes.fr/hal-00757985>.
- Quan Yang, Abdel Aitouche, and Belkacem Ould Bouamama. Structural Analysis for Fault Detection and Isolation in Fuel Cell Stack System. In *Sustainability in Energy & Buildings*, pages 239–254. Springer, Berlin Heidelberg, 2009. URL <https://hal.archives-ouvertes.fr/hal-00757902>.
- Rochdi Merzouki, A.K. Samantaray, M. Pathak, and Belkacem Ould Bouamama. *Intelligent Mechatronic Systems: Modelling, Control and Diagnosis*. Springer Verlag, 2013. URL <https://hal.archives-ouvertes.fr/hal-00757964>.
- Arun Kumar Samantaray and Belkacem Ould-Bouamama. *Model-based Process Supervision. A Bond Graph Approach*. Springer Verlag, 2008. URL <https://hal.archives-ouvertes.fr/hal-00795310>.
- Jean Thomas and Belkacem Ould Bouamama. *Modelling and Simulation in Thermal and Chemical Engineering*. Springer Verlag, 2000. URL <https://hal.archives-ouvertes.fr/hal-01730945>.

## Liste Publications B. Ould Bouamama

### REVUES DE RANG A

- Ibrahim Abdallah, Anne-Lise Gehin, and Belkacem Ould Bouamama. On-line robust graphical diagnoser for hybrid dynamical systems. *Engineering Applications of Artificial Intelligence*, 69:36 – 49, March 2018. doi: 10.1016/j.engappai.2017.12.002. URL <https://hal.archives-ouvertes.fr/hal-01682231>.
- Mayank-Shekhar Jha, Geneviève Dauphin-Tanguy, and Belkacem Ould-Bouamama. Robust fault detection with Interval Valued Uncertainties in Bond Graph Framework. *Control Engineering Practice*, 71:61 – 78, February 2018. doi: 10.1016/j.conengprac.2017.10.009. URL <https://hal.archives-ouvertes.fr/hal-01728226>.
- Ibrahim Abdallah, Anne-Lise Gehin, and Belkacem Ould Bouamama. Event driven Hybrid Bond Graph for Hybrid Renewable Energy Systems part I: Modelling and operating mode management. *International Journal of Hydrogen Energy*, December 2017. doi: 10.1016/j.ijhydene.2017.10.144. URL <https://hal.archives-ouvertes.fr/hal-01682236>.
- Pushendra Kumar, Rochdi Merzouki, and Belkacem Ould Bouamama. Multilevel Modeling of System of Systems. *IEEE Transactions on Systems, Man, and Cybernetics: Systems*, pages 1 – 12, February 2017. doi: 10.1109/TSMC.2017.2668065. URL <https://hal.archives-ouvertes.fr/hal-01667881>.
- Mayank Shekhar Jha, Mathieu Bressel, Belkacem Ould-Bouamama, and Geneviève Dauphin-Tanguy. Particle filter based hybrid prognostics of proton exchange membrane fuel cell in bond graph framework. *Computers & Chemical Engineering*, 95:216 – 230, December 2016. doi: 10.1016/j.compchemeng.2016.08.018. URL <https://hal.archives-ouvertes.fr/hal-01728224>.
- Ibtissam Abdesselam, Hafid Haffaf, and Belkacem Ould Bouamama. Bond-graphs and hyper-graphs in system of systems modelling. *International Journal of System of Systems Engineering*, 7(4), 2016. doi: 10.1504/IJSSE.2016.10001213. URL <https://hal.archives-ouvertes.fr/hal-01726282>.
- Jha Mayank Shekhar, Geneviève Dauphin-Tanguy, and Belkacem Ould Bouamama. Particle Filter Based Hybrid Prognostics for Health Monitoring of Uncertain Systems in Bond Graph Framework. *Mechanical Systems and Signal Processing*, 75:301–329, 2016. doi: 10.1016/j.ymsp.2016.01.010. URL <https://hal.archives-ouvertes.fr/hal-01449915>.
- Mohamed Ilyas Rahal, Belkacem Ould Bouamama, and Abdelmajid Meghebbar. Hybrid bond graph model based for robust fault detection and isolation. *Proceedings of the Institution of Mechanical Engineers, Part I: Journal of Systems and Control Engineering*, 230(2):145 – 163, December 2015. doi: 10.1177/0959651815616026. URL <https://hal.archives-ouvertes.fr/hal-01726310>.
- Mathieu Bressel, Mickael Hilairret, Hissel Daniel, and Belkacem Ould Bouamama. Remaining Useful Life Prediction and Uncertainty Quantification of Proton Exchange Membrane Fuel Cell Under Variable Load. *IEEE Transactions on Industrial Electronics*, December 2015a. doi: 10.1109/TIE.2016.2519328. URL <https://hal.archives-ouvertes.fr/hal-01558245>.
- Mathieu Bressel, Belkacem Ould Bouamama, Hissel Daniel, and Mickael Hilairret. A Review on Graphical Methods for Modeling a Proton Exchange Membrane Fuel Cell. *Journal of Fuel Cell Science and Technology*, December 2015b. doi: 10.1115/1.4032336. URL <https://hal.archives-ouvertes.fr/hal-01558215>.
- Mathieu Bressel, Mickael Hilairret, Daniel Hissel, and Belkacem Ould Bouamama. Extended Kalman Filter for prognostic of Proton Exchange Membrane Fuel Cell. *Applied Energy*, 164:220 – 227, November 2015c. doi: 10.1016/j.apenergy.2015.11.071. URL <https://hal.archives-ouvertes.fr/hal-01558212>.
- Nizar Chatti, Belkacem Ould-Bouamama, Anne-Lise Gehin, and Rochdi Merzouki. Signed Bond Graph for multiple faults diagnosis. *Engineering Applications of Artificial Intelligence*, 36:134 – 147,

November 2014. doi: 10.1016/j.engappai.2014.07.018. URL <https://hal.archives-ouvertes.fr/hal-01730187>.

Pushpendra Kumar, Rochdi Merzouki, Blaise Conrard, Vincent Coelen, and Belkacem Ould Bouamama. Multilevel Modeling of the Traffic Dynamic. *IEEE Transactions on Intelligent Transportation Systems*, 15(3):1066 – 1082, June 2014. doi: 10.1109/TITS.2013.2294358. URL <https://hal.archives-ouvertes.fr/hal-01667886>.

Belkacem Ould Bouamama, G. Biswas, R. Loureiro, and R. Merzouki. Graphical methods for diagnosis of dynamic systems: Review. *Annual Reviews in Control*, 38(2):199 – 219, 2014. doi: 10.1016/j.arcontrol.2014.09.004. URL <https://hal.archives-ouvertes.fr/hal-01726301>.

Abd Essalam Badoud, Mabrouk Khemliche, Belkacem Ould Bouamama, Seddik Bacha, and Luiz Fernando Lavado Villa. Bond graph modeling and optimization of photovoltaic pumping system: Simulation and experimental results. *Simulation Modelling Practice and Theory*, 36:84 – 103, August 2013a. doi: 10.1016/j.simpat.2013.05.001. URL <https://hal.archives-ouvertes.fr/hal-01726317>.

A. Badoud, M. Khemliche, B. Ould Bouamama, Seddik Bacha, and Luiz Fernando Lavado Villa. Bond graph modeling and optimization of photovoltaic pumping system: Simulation and experimental results. *Simulation Modelling Practice and Theory*, 36:84–103, August 2013b. URL <https://hal.archives-ouvertes.fr/hal-00926267>.

Nizar Chatti, Anne-Lise Gehin, Belkacem Ould-Bouamama, and Rochdi Merzouki. Functional and Behavior Models for the Supervision of an Intelligent and Autonomous System. *IEEE Transactions on Automation Science and Engineering*, 10(2):431 – 445, April 2013a. doi: 10.1109/TASE.2012.2211350. URL <https://hal.archives-ouvertes.fr/hal-01730193>.

Mohand Arab Djeziri, Rochdi Merzouki, Belkacem Ould Bouamama, and Mustapha Ouladsine. Fault Diagnosis and Fault-Tolerant Control of an Electric Vehicle Overactuated. *IEEE Transactions on Vehicular Technology*, 62(3):986 – 994, March 2013. doi: 10.1109/TVT.2012.2231950. URL <https://hal.archives-ouvertes.fr/hal-01726329>.

Nizar Chatti, Anne-Lise Gehin, Belkacem Ould Bouamama, and Rochdi Merzouki. Functional and behavioural models for the supervision of an intelligent and autonomous system. *IEEE Transactions on Automation Science and Engineering*, 10(2):431–445, 2013b. URL <https://hal.archives-ouvertes.fr/hal-00758291>.

Rui Loureiro, Rochdi Merzouki, and Belkacem Ould-Bouamama. Bond Graph Model Based on Structural Diagnosability and Recoverability Analysis: Application to Intelligent Autonomous Vehicles. *IEEE Transactions on Vehicular Technology*, 61(3):986–997, March 2012. URL <https://hal.archives-ouvertes.fr/hal-00747553>.

A. Zaidi, Belkacem Ould Bouamama, and M. Tagina. Bond Graph and Bayesian Networks for Reliable Diagnosis. *International Journal of SIMULATION: Systems, Science & Technology*, 12(5):1240–1253, 2012a. URL <https://hal.archives-ouvertes.fr/hal-00758007>.

Youcef Touati, Rochdi Merzouki, and Belkacem Ould Bouamama. Robust diagnosis to measurement uncertainties using bond graph approach: Application to intelligent autonomous vehicle. *Mechatronics*, page 13, 2012. doi: 10.1016/j.mechatronics.2012.09.012. URL <https://hal.archives-ouvertes.fr/hal-00749169>.

A. Zaidi, Belkacem Ould Bouamama, and M. Tagina. Bayesain reliability models of Weibull systems: State of the art. *International Journal of Applied Mathematics and Computer Science*, 22(3):585–600, 2012b. URL <https://hal.archives-ouvertes.fr/hal-00758005>.

T. K. Bera, Rochdi Merzouki, Belkacem Ould Bouamama, and A. K. Samantaray. Force control in parallel manipulator through virtual simulations. *Proceedings of the Institution of Mechanical Engineers, Part I: Journal of Systems and Control Engineering*, 226(8):1089–1106, 2012a. URL <https://hal.archives-ouvertes.fr/hal-00758002>.

- T.K Bera, Rochdi Merzouki, Belkacem Ould Bouamama, and A. K. Samantaray. Design and validation of a reconfiguration strategy for a redundantly actuated intelligent autonomous vehicle. *Proceedings of the Institution of Mechanical Engineers, Part I: Journal of Systems and Control Engineering*, 226(8):1060–1076, 2012b. URL <https://hal.archives-ouvertes.fr/hal-00758001>.
- Wissam Khalil, Rochdi Merzouki, Belkacem Ould Bouamama, and Haffid Haffaf. Hypergraph Models for System of Systems Supervision Design. *IEEE Transactions on Systems, Man and Cybernetics, Part A: Systems and Humans*, 42(4):1005–1012, 2012. URL <https://hal.archives-ouvertes.fr/hal-00758010>.
- Abdel Aitouche, Quan Yang, and Belkacem Ould Bouamama. Fault detection and isolation of PEM fuel cell system based on nonlinear analytical redundancy. *European Physical Journal: Applied Physics*, 54(2):1–11, May 2011a. doi: 10.1051/epjap/2011100250. URL <https://hal.archives-ouvertes.fr/hal-00801760>.
- A. Aitouche, Q. Yang, and B. Ould Bouamama. Fault detection and isolation of PEM fuel cell system based on nonlinear analytical redundancy. *European Physical Journal: Applied Physics*, 54(2), May 2011b. doi: 10.1051/epjap/2011100250. URL <https://hal.archives-ouvertes.fr/hal-00699211>.
- Belkacem Ould Bouamama, R. El Harabi, M.N. Abdelkrim, and M.K. Bengayed. Bond Graphs for diagnosis of Chemical Processes. *Computers & Chemical Engineering*, 36:301–324, 2011. URL <https://hal.archives-ouvertes.fr/hal-00758000>.
- Abdel Aitouche and Belkacem Ould Bouamama. Sensor location with respect to fault tolerance Properties. *International Journal of Automation and Control*, 4(3):298–318, 2010. URL <https://hal.archives-ouvertes.fr/hal-00758131>.

## Conférences Internationales

- Béranger Six, Belkacem Ould Bouamama, Sylvain Lintz, and Anne-Lise Gehin. Automated model builder of hybrid bond graph: Application to a two level inverter. In *IEEE 11th International Symposium on Diagnostics for Electrical Machines, Power Electronics and Drives (SDEMPED 2017)*, Tinos, Greece, August 2017a. URL <https://hal.archives-ouvertes.fr/hal-01682273>.
- NAOUEL KACI, B. Ould Bouamama, I Boussaada, and Achour Debiane. Structural diagnosability analysis. Application to an induction motor . In *2017 IEEE 11th International Symposium on Diagnostics for Electrical Machines, Power Electronics and Drives (SDEMPED)*, Tinos, Greece, August 2017. URL <https://hal.archives-ouvertes.fr/hal-01658216>.
- Ibrahim Abdallah, Anne-Lise Gehin, and Belkacem Ould Bouamama. Hybrid bond graph modelling of multi-source system for green hydrogen production. In *25th Mediterranean Conference on Control and Automation (MED 2017)*, Valetta, Malta, July 2017. URL <https://hal.archives-ouvertes.fr/hal-01682250>.
- B Six, B. Ould-Bouamama, and Anne-Lise Gehin. Automated Model Builder of Hybrid Bond Graph : Application to a two level inverter. In *SDEMPED*, Tinos, Greece, 2017b. URL <https://hal.archives-ouvertes.fr/hal-01660916>.
- Mathieu Bressel, Mickael Hilaret, Hissel Daniel, and Belkacem Ould Bouamama. Fuel Cell Remaining Useful Life Prediction and Uncertainty Quantification Under an Automotive Profile. In *IECON 2016*, Florence, Italy, October 2016a. URL <https://hal.archives-ouvertes.fr/hal-01558274>.
- Ibrahim Abdallah, Anne-Lise Gehin, and Belkacem Ould Bouamama. Event Driven Hybrid Bond Graph. In *European Control Conference*, Aalborg, Denmark, June 2016a. URL <https://hal.archives-ouvertes.fr/hal-01409152>.
- Mathieu Bressel, Mayank Shekhar JHA, Belkacem Ould Bouamama, Mickael Hilaret, and Hissel Daniel. Bond Graph for modeling and diagnostics of Proton Exchange Membrane Fuel Cell. In *ICBGM 2016*, Montréal, Canada, June 2016b. URL <https://hal.archives-ouvertes.fr/hal-01558272>.
- Ibrahim Abdallah, Anne-Lise Gehin, and Belkacem Ould Bouamama. Functional Hybrid Bond Graph for Operating Mode Management. In *4th IFAC Conference on Intelligent Control and Automation Sciences, ICONS 2016*, Reims, France, June 2016b. doi: 10.1016/j.ifacol.2016.07.134. URL <https://hal.archives-ouvertes.fr/hal-01409117>.
- Béranger Six, Belkacem Ould Bouamama, Sylvain Lintz, and Anne-Lise Gehin. Railway direct braking system analysis using hybrid bond graph. In *International Conference on Control, Decision and Information Technologies (CoDIT'2016)*, Saint Julian's, Malta, April 2016. doi: 10.1109/CoDIT.2016.7593531. URL <https://hal.archives-ouvertes.fr/hal-01409027>.
- Mathieu Bressel, Mickael Hilaret, Hissel Daniel, and Belkacem Ould Bouamama. Fuel Cells Remaining Useful Life estimation using an Extended Kalman Filter. In *IECON 2015*, Yokohama, Japan, November 2015a. URL <https://hal.archives-ouvertes.fr/hal-01558248>.
- Anne-Lise Gehin and Belkacem Ould Bouamama. Design of distributed Fault Detection and Isolation Systems. In *9th IFAC Symposium on Fault Detection, Supervision and Safety for Technical Processes SAFEPROCESS 2015*, Paris, France, September 2015. doi: 10.1016/j.ifacol.2015.09.642. URL <https://hal.archives-ouvertes.fr/hal-01412427>.
- Mayank Shekhar Jha, G. Dauphin-Tanguy, B. Ould-Bouamama, M. Kebdani, A. Dazin, and P. Dupont. Bond graph model of a mechanically Pumped Biphasic Loop. (MPBL). In *2015 23th Mediterranean Conference on Control and Automation (MED)*, volume 75, pages 301 – 329, Torremolinos, France, June 2015. IEEE. doi: 10.1109/MED.2015.7158789. URL <https://hal.archives-ouvertes.fr/hal-01727813>.

- Pushpendra Kumar, Rochdi Merzouki, Belkacem Ould Bouamama, and Koubeissi Ahmad. Bond Graph Modeling of a Class of System of Systems. In *10th System of Systems Engineering Conference, 17 - 20 May 2015, San Antonio, TX, USA*, San Antonio, United States, May 2015. URL <https://hal.archives-ouvertes.fr/hal-01667913>.
- Tarassov Eugene, Christophe Sueur, Belkacem Ould Bouamama, and Geneviève Dauphin-Tanguy. Bond-graph-based multivariable non-linear UIO-type estimation. In *MATHMOD Vienna, 8th International Conference on Mathematical Modelling*, Vienna, Austria, February 2015. URL <https://hal.archives-ouvertes.fr/hal-01439193>.
- Mathieu Bressel, Mickael Hilairret, Hissel Daniel, and Belkacem Ould Bouamama. Dynamical modeling of Proton Exchange Membrane Fuel Cell and parameters identification. In *FDFC 2015*, Toulouse, France, February 2015b. URL <https://hal.archives-ouvertes.fr/hal-01558247>.
- Tarassov Eugene, Christophe Sueur, and Belkacem Ould Bouamama. UIO approach for estimation of non-linear components behaviour. In *53rd IEEE Conference on Decision and Control, CDC'14*, Los Angeles, California, United States, December 2014a. URL <https://hal.archives-ouvertes.fr/hal-01439199>.
- Tarassov Eugene, Christophe Sueur, Belkacem Ould Bouamama, and Geneviève Dauphin-Tanguy. Flat control of a Torsion Bar with unknown input estimation. In *Multi-Conference on Systems and Control, IEEE MSC 2014*, Antibes, France, October 2014b. URL <https://hal.archives-ouvertes.fr/hal-01439213>.
- Tarassov Eugene, Christophe Sueur, and Belkacem Ould Bouamama. Component failure estimation with Unknown Input Observer: a physical approach. In *Multi-Conference on Systems and Control, IEEE MSC 2014*, Antibes, France, October 2014c. URL <https://hal.archives-ouvertes.fr/hal-01439215>.
- Pushpendra Kumar, Rochdi Merzouki, Blaise Conrard, and Belkacem Ould-Bouamama. Multi-level Reconfiguration Strategy for the System of Systems Engineering: Application to Platoon of Vehicles. In *19th IFAC World Congress*, Cape Town, South Africa, August 2014. URL <https://hal.archives-ouvertes.fr/hal-01667918>.
- M.S. Jha, G. Dauphin-Tanguy, and B. Ould Bouamama. Robust FDI based on LFT BG and relative activity at junction. In *2014 European Control Conference (ECC)*, Strasbourg, France, June 2014. IEEE. doi: 10.1109/ECC.2014.6862614. URL <https://hal.archives-ouvertes.fr/hal-01727841>.
- Gahlouz Ibtisem, Tarassov Eugene, Christophe Sueur, and Belkacem Ould Bouamama. Bond graph UIO approach for fault components monitoring. In *2nd International Conference on Control and Fault-Tolerant Systems, SysTol'13*, Nice, France, October 2013. URL <https://hal.archives-ouvertes.fr/hal-01439221>.
- Tarassov Eugene, Gahlouz Ibtisem, Christophe Sueur, and Belkacem Ould Bouamama. Sensor fault modelling and estimation: a bond graph approach. In *2nd International Conference on Control and Fault-Tolerant Systems, SysTol'13*, Nice, France, October 2013a. URL <https://hal.archives-ouvertes.fr/hal-01439223>.
- Tarassov Eugene, Gahlouz Ibtisem, Christophe Sueur, and Belkacem Ould Bouamama. State and unknown input observer: analysis and design. In *7th International Conference on "Integrated Modeling and Analysis in Applied Control and Automation" IMAACA'13, part of I3M2013*, Athens, Greece, September 2013b. URL <https://hal.archives-ouvertes.fr/hal-01439226>.
- Nizar Chatti, Belkacem Ould Bouamama, Anne-Lise Gehin, and Rochdi Merzouki. Merging Bond-Graphs and Signed Directed Graphs to improve FDI procedure. In *12th biannual European Control Conference, ECC 2013*, page 8 pages, Zurich, Switzerland, July 2013a. URL <https://hal.archives-ouvertes.fr/hal-00837758>.

- Nizar Chatti, Belkacem Ould Bouamama, Anne-Lise Gehin, and Rochdi Merzouki. Signed Bond Graph for health monitoring of PEM fuel cell. In *5th International Conference of Development of Fuel Cells*, page 6 pages, Karlsruhe, Germany, April 2013b. URL <https://hal.archives-ouvertes.fr/hal-00808581>.
- Dapeng Yang, Tarassov Eugene, Christophe Sueur, and Belkacem Ould Bouamama. New unknown input observer for control design: a bond graph approach. In *4th IFAC Symposium on System Structure and Control, SSSC-IFAC 2013*, Grenoble, France, February 2013. URL <https://hal.archives-ouvertes.fr/hal-01439230>.
- Tarun Kumar Bera, Arun Kumar Samantaray, Rochdi Merzouki, and Belkacem Ould Bouamama. Bond Graph Modeling of an Over-actuated Intelligent Autonomous Vehicle with Decoupled Steering Wheel. In *IEEE International Conference on Robotics and Biomimetics (ROBIO 2012)*, page 6, China, December 2012. URL <https://hal.archives-ouvertes.fr/hal-00758385>.
- M. Jha, Geneviève Dauphin-Tanguy, and Belkacem Ould Bouamama. Interval Approach for Robust Fault Diagnosis. In *6th International Conference on "Integrated Modeling and Analysis in Applied Control and Automation" IMAACA'12, part of I3M2012 "International Mediterranean and Latin American Modelling Multiconference"*, page 6, Vienne, Austria, September 2012. URL <https://hal.archives-ouvertes.fr/hal-00825058>.
- Milka Uzunova, Mohamed Djemai, and Belkacem Ould Bouamama. Hybrid Bond Graphs for Diagnosis of Three Cells Converter. In *8th IFAC Symposium on Fault Detection, Supervision and Safety for Technical Processes*, pages 162–167, Mexico, September 2012. doi: 10.3182/20120829-3-MX-2028.00186. URL <https://hal.archives-ouvertes.fr/hal-00762634>.
- Nizar Chatti, Anne-Lise Gehin, Belkacem Ould Bouamama, Rochdi Merzouki, and Youssef Touati. Bond Graph Model Based and Fuzzy Logic for Robust FDI of Mechatronic Systems. In *8th IFAC Symposium on Fault Detection, Supervision and Safety for Technical Processes*, pages 126–131, Mexico, Mexico, August 2012a. URL <https://hal.archives-ouvertes.fr/hal-00730184>.
- Youcef Touati, Rochdi Merzouki, and Belkacem Ould Bouamama. Fault Estimation and Isolation Using Bond Graph Approach. In *The 8th IFAC Symposium on Fault Detection, Supervision and Safety of Technical Processes*, pages 138–143, Mexico City, Mexico, August 2012a. URL <https://hal.archives-ouvertes.fr/hal-00750355>.
- Youcef Touati, Rochdi Merzouki, Belkacem Ould Bouamama, and Rui Loureiro. Detectability and Isolability Conditions in Presence of Measurement and Parameter Uncertainties Using Bond Graph Approach. In *The 8th IFAC Symposium on Fault Detection, Supervision and Safety of Technical Processes*, pages 958–963, Mexico City, Mexico, August 2012b. URL <https://hal.archives-ouvertes.fr/hal-00750358>.
- Abdel Aitouche, Severus Olteanu, and Belkacem Ould Bouamama. Survey and Analysis of Diagnostic of Fuel Cell Stack Systems Survey and Analysis of Diagnostic of Fuel Cell Stack Systems. In IFAC PapersOnline, editor, *Fault Detection, Supervision and Safety of Technical Processes, SAFEPROCESS 2012*, volume 8, pages 84–89, Mexico City, Mexico, August 2012. doi: 10.3182/20120829-3-MX-2028.00261. URL <https://hal.archives-ouvertes.fr/hal-00801992>.
- Youcef Touati, Rochdi Merzouki, Belkacem Ould Bouamama, and Rui Loureiro. Detectability and Isolability Conditions in Presence of Measurement and Parameter Uncertainties Using Bond Graph. In *The 8th International Federation of Automatic Control (IFAC) Symposium SAFEPROCESS-2012*, page 6, Mexico, August 2012c. URL <https://hal.archives-ouvertes.fr/hal-00758366>.
- Samir Benmoussa, Rochdi Merzouki, and Belkacem Ould Bouamama. Plant Fault Diagnosis using Bond Graph Approach: Application to Intelligent Autonomous Vehicle. In *The 8th International Federation of Automatic Control (IFAC) Symposium SAFEPROCESS-2012*, page 6, Mexico, August 2012. URL <https://hal.archives-ouvertes.fr/hal-00758399>.



- Youcef Touati, Rochdi Merzouki, and Belkacem Ould Bouamama. Fault Estimation and Isolation Using Bond Graph Approach. In *The 8th International Federation of Automatic Control (IFAC) Symposium SAFEPROCESS-2012*, page 6, Mexico, August 2012d. URL <https://hal.archives-ouvertes.fr/hal-00758360>.
- Rui Loureiro, Rochdi Merzouki, and Belkacem Ould-Bouamama. Structural Reconfiguration Conditions Based on Bond Graph Approach: Application to an Intelligent Autonomous Vehicle. In *8th IFAC Symposium on Fault Detection, Supervision and Safety of Technical Processes*, pages 970–975, Mexico, August 2012a. URL <https://hal.archives-ouvertes.fr/hal-00749168>.
- Rui Loureiro, Rochdi Merzouki, and Belkacem Ould-Bouamama. Extension of the Bond Graph Causality Inversion Method for Fault Detection and Isolation: Application to a Mechatronic System. In *8th IFAC Symposium on Fault Detection, Supervision and Safety of Technical Processes*, pages 150–155, Mexico, August 2012b. URL <https://hal.archives-ouvertes.fr/hal-00749170>.
- Youssef Touati, Rochdi Merzouki, and Belkacem Ould Bouamama. Fault Estimation Using Bicausal Bond Graph and Linear Fractional Transformation. In *The 7th IEEE Conference on Industrial Electronics and Applications (ICIEA 2012)*, page 6, Singapore, July 2012e. URL <https://hal.archives-ouvertes.fr/hal-00758356>.
- Rui Loureiro, Samir Benmoussa, Youcef Touati, Rochdi Merzouki, and Belkacem Ould-Bouamama. Graphical Approach for State Reconstruction and Monitoring Analysis. In *In The 7th IEEE Conference on Industrial Electronics and Applications*, pages 1205–1210, Singapore, July 2012c. URL <https://hal.archives-ouvertes.fr/hal-00749173>.
- Mohand Arab Djeziri, Samir Benmoussa, Belkacem Ould Bouamama, and Mustapha Ouladsine. Wavelet Decomposition Applied to Fluid Leak Detection and Isolation in Presence of Disturbances. In *The 20th Mediterranean Conference on Control and Automation, MED 2012*, page 6, Spain, July 2012. URL <https://hal.archives-ouvertes.fr/hal-00758393>.
- Pushpendra Kumar, Belkacem Ould Bouamama, and Hafid Haffaf. Communication aspect in ICT for Freight Transport System. In *The 8th International Conference on Wireless and Mobile Communications*, Venice, Italy, June 2012. URL <https://hal.archives-ouvertes.fr/hal-01730294>.
- Christophe Sueur and Belkacem Ould Bouamama. Bond Graph Model based for structural component diagnosability analysis. In *2th International Conference on Systems and Control*, page cd rom, Marrakech, Morocco, June 2012. URL <https://hal.archives-ouvertes.fr/hal-00749587>.
- Nizar Chatti, Anne-Lise Gehin, Rochdi Merzouki, and Belkacem Ould Bouamama. Contribution à la prise de décision robuste pour la détection de défauts: Application à un robot omnidirectionne. In *13ème Colloque AIP PRIMECA. Démarche et innovation dans la production des systèmes intégrés*, Le Mont Dore, France, March 2012b. URL <https://hal.archives-ouvertes.fr/hal-00685594>.
- Kumar Pushpendra, Belkacem Ould Bouamama, and Hafid Haffaf. Communication aspect in ICT for Freight Transport System. In *The 8th International Conference on Wireless and Mobile Communications*, page 6, Italy, 2012. URL <https://hal.archives-ouvertes.fr/hal-00758863>.
- Youcef Touati, Belkacem Ould Bouamama, and Rochdi Merzouki. Robust Residuals Generation and Evaluation Using Bond Graph and Linear Filtering. In *IEEE International Conference on Robotics and Biomimetics*, pages 2318–2323, Phuket, Thailand, December 2011a. doi: 10.1109/RO-BIO.2011.6181644. URL <https://hal.archives-ouvertes.fr/hal-00749176>.
- Wissam Khalil, Rochdi Merzouki, Belkacem Ould Bouamama, and Hafid Haffaf. System of Systems Architectural Modeling. In *PAPYRUS Workshop on Fault Diagnosis and Fault Tolerant Control in large scale processing industries*, page 6, France, October 2011a. URL <https://hal.archives-ouvertes.fr/hal-00758717>.

- Wissam Khalil, Rochdi Merzouki, and Belkacem Ould Bouamama. Dynamic Model-Based for Intelligent Traffic Optimization inside Seaport Terminal. In *The 14th International Conference on Harbor, Maritime & Multimodal Logistics Modelling and Simulation*, pages 75 – 79, Italy, September 2011b. URL <https://hal.archives-ouvertes.fr/hal-00758722>.
- Samir Benmoussa, Belkacem Ould Bouamama, and Rochdi Merzouki. Component fault detection and isolation: comparison between bond graph and algebraic approach. In *The 5th International Conference on Integrated Modeling and Analysis in Applied Control and Automation (IMAACA 2011)*, page 6, Italy, September 2011. URL <https://hal.archives-ouvertes.fr/hal-00758654>.
- Nizar Chatti, Wissam Khalil, Anne-Lise Gehin, Belkacem Ould Bouamama, and Rochdi Merzouki. Intelligent Supervision of Autonomous Heavy Vehicles : Application to Maritime Area. In *14th International Conference on Harbor, Maritime & Multimodal Logistic Modelling and Simulation*, Rome, Italy, September 2011a. URL <https://hal.archives-ouvertes.fr/hal-00685466>.
- Quan Yang, Abdel Aitouche, and Belkacem Ould Bouamama. Fault detection and isolation of PEM fuel cell system by analytical redundancy. In IEEE XPLORE, editor, *18th Mediterranean Conference on Control & Automation (MED), 2010*, pages 1371–1376, Marrakech, France, June 2011. doi: 10.1109/MED.2010.5547857. URL <https://hal.archives-ouvertes.fr/hal-00804081>.
- Nizar Chatti, Anne-Lise Gehin, Belkacem Ould Bouamama, and Rochdi Merzouki. Modèles de comportement et fonctionnel pour la supervision d'un système autonome. In *4èmes Journées Doctorales / Journées Nationales MACS*, Marseille, France, June 2011b. URL <https://hal.archives-ouvertes.fr/hal-00685581>.
- Nizar Chatti, Anne-Lise Gehin, Belkacem Ould Bouamama, and Rochdi Merzouki. Functional and behavior models for the supervision of an intelligent and autonomous system. In *IEEE Intelligent Vehicle Symposium (IV)*, Baden-Baden, Germany, June 2011c. URL <https://hal.archives-ouvertes.fr/hal-00685494>.
- Youcef Touati, Rochdi Merzouki, and Belkacem Ould Bouamama. Fault Detection and Isolation in Presence of Input and Output Uncertainties Using Bond Graph Approach. In *IMAACA*, pages 221–227, Rome, Italy, 2011b. URL <https://hal.archives-ouvertes.fr/hal-00749174>.
- Quan Yang, Abdel Aitouche, and Belkacem Ould Bouamama. Model based fault detection and isolation of PEM fuel cell. In IEEE XPLORE, editor, *Conference on Control and Fault-Tolerant Systems (SysTol), 2010*, pages 825–830, Nice, France, September 2010a. doi: 10.1109/SYSTOL.2010.5676088. URL <https://hal.archives-ouvertes.fr/hal-00804077>.
- Wissam Khalil, Rochdi Merzouki, and Belkacem Ould Bouamama. Modelling for Optimal Trajectory Planning of an Intelligent Transportation System. In *The 7th Symposium on Intelligent Autonomous Vehicles (IAV 2010)*, page 6, Italy, September 2010a. URL <https://hal.archives-ouvertes.fr/hal-00758724>.
- A. Zaidi, Moncef Tagina, and Belkacem Ould Bouamama. Reliability Data for improvement of Decision-Making in Analytical Redundancy Relations Bond Graph based Diagnosis. In *IEEE/ASME International Conference on Advanced Intelligent Mechatronics*, page 6, Canada, July 2010. URL <https://hal.archives-ouvertes.fr/hal-00758665>.
- Wissam Khalil, Rochdi Merzouki, and Belkacem Ould Bouamama. Operating Management of Intelligent & Autonomous MIMO Vehicles. In *IEEE Conference on Robotics, Automation and Mechatronics (RAM 2010)*, pages 465–469, Singapore, June 2010b. URL <https://hal.archives-ouvertes.fr/hal-00758726>.
- Q. Yang, Abdel Aitouche, and Belkacem Ould Bouamama. Fault detection and isolation of PEM fuel cell system by analytical redundancy. In *18th Mediterranean Conference, on Control and Automation (MED2010)*, pages 1371–1376, Morocco, June 2010b. URL <https://hal.archives-ouvertes.fr/hal-00758671>.

- Samir Benmoussa, Mohand Arab Djeziri, Belkacem Ould Bouamama, and Rochdi Merzouki. Empirical mode decomposition applied to fluid leak detection and isolation in process engineering. In *The 18th Mediterranean Conference on Control and Automation MED 2010*, page 6, Morocco, June 2010. URL <https://hal.archives-ouvertes.fr/hal-00758664>.
- Quan Yang, Abdel Aitouche, and Belkacem Ould Bouamama. Détection de fautes par redondance analytique de l'alimentation en air d'une pile à combustible de type PEM. In *Conférence Internationale Francophone de l'Automatique (CIFA)*, pages 1–6, Nancy, France, June 2010c. URL <https://hal.archives-ouvertes.fr/hal-00804100>.
- Quan Yang, Abdel Aitouche, and Belkacem Ould Bouamama. Fault detection and isolation Applied to an Air Supply Subsystem. In *International Conference on Renewable energy, Generation and application, ICREGA'10*, pages 1–6, AL AIN, United Arab Emirates, March 2010d. URL <https://hal.archives-ouvertes.fr/hal-00804084>.
- R. El Harabi, Belkacem Ould Bouamama, M. El Koni Ben Gayed, and M.N. Abelkrim. Pseudo Bond Graph for Fault Detection and Isolation of an Industrial Chemical Reactor, Part II: FDI System Design. In *9th International Conference on Bond Graph Modeling and Simulation*, page 6, United States, 2010a. URL <https://hal.archives-ouvertes.fr/hal-00758689>.
- R. El Harabi, Belkacem Ould Bouamama, M. El Koni Ben Gayed, and M.N. Abelkrim. Pseudo Bond Graph for Fault Detection and Isolation of an Industrial Chemical Reactor, Part I: Bond Graph Modeling. In *9th International Conference on Bond Graph Modeling and Simulation*, page 6, United States, 2010b. URL <https://hal.archives-ouvertes.fr/hal-00758685>.
- Quan Yang, Abdel Aitouche, and Belkacem Ould Bouamama. Residuals Generation based on Non-linear Analytical Redundancy Applied to Air Supply Sub-System of Fuel Cell. In *7th Workshop on Advanced Control and Diagnosis*, pages 1–6, Zielona, Poland, November 2009a. URL <https://hal.archives-ouvertes.fr/hal-00758698>.
- Quan Yang, Abdel Aitouche, and Belkacem Ould Bouamama. Structural Analysis for Air Supply System of Fuel Cell. In *International Renewable Energy Congress IREC'09*, pages 100–105, Sousse, Tunisia, November 2009b. URL <https://hal.archives-ouvertes.fr/hal-00804098>.
- Mohand Arab Djeziri, Rochdi Merzouki, and Belkacem Ould Bouamama. Integrated Supervision Approach Applied to an Electric Vehicle. In *European Control Conference*, page 6, Hungary, August 2009a. URL <https://hal.archives-ouvertes.fr/hal-00758704>.
- Rochdi Merzouki, Mohand Arab Djeziri, and Belkacem Ould Bouamama. Intelligent Monitoring of Electric Vehicle. In *IEEE/ASME Conference on Advanced Intelligent Mechatronics (AIM2009)*, pages 797–804, Singapore, July 2009. URL <https://hal.archives-ouvertes.fr/hal-00758706>.
- Mohand Arab Djeziri, Belkacem Ould Bouamama, and Rochdi Merzouki. Optimal Sensor Placement For Fault Diagnosis. In *Proceeding 5th IEEE International Conference on Mechatronics*, page 6, Spain, April 2009b. URL <https://hal.archives-ouvertes.fr/hal-00758701>.
- Vincent Coelen, Rochdi Merzouki, Eric Lartigau, and Belkacem Ould Bouamama. Surveillance de la Curiethérapie Robotisée de la Prostate. In *Conférence nationale de l'Oncologie*, page 7, France, 2009. URL <https://hal.archives-ouvertes.fr/hal-00758297>.
- R. El Harabi, Belkacem Ould Bouamama, M. El Koni Ben Gayed, and M.N. Abelkrim. FDI of Chemical Process using Bond Graph Tool. In *14th IEEE IFAC International Conference on Methods and Models in Automation and Robotics*, page 6, Poland, 2009. URL <https://hal.archives-ouvertes.fr/hal-00758693>.
- Q. Yang, Belkacem Ould Bouamama, and Abdel Aitouche. Structural Diagonasibility of Fuel Cell Systems: A Bond Graph Approach. In *7th IFAC Symposium on Fault Detection, Supervision and Safety of Technical Processes*, page 6, Spain, 2009c. URL <https://hal.archives-ouvertes.fr/hal-00758695>.

- Wissam Khalil, Rochdi Merzouki, and Belkacem Ould Bouamama. Dynamic Modelling of a Train of Intelligent Vehicles inside a Confined Space. In *12th IFAC Symposium on Control in Transportation*, pages 619–626, United States, 2009. URL <https://hal.archives-ouvertes.fr/hal-00758683>.
- Khaled Fawaz, Rochdi Merzouki, and Belkacem Ould-Bouamama. Fault Detection of Actuators and Channel Transmission Using Virtual Simulation. In *Proceedings of the 17th IFAC World Congress*, pages 13118–13118, South Korea, 2008a. URL <https://hal.archives-ouvertes.fr/hal-00795262>.
- Mohand Arab Djeziri, Belkacem Ould-Bouamama, and Rochdi Merzouki. Robust Fault Diagnosis of Energetic System with Parameter Uncertainties. In *Proceedings of the 17th IFAC World Congress*, pages 6114–6119, South Korea, 2008a. URL <https://hal.archives-ouvertes.fr/hal-00795268>.
- Khaled Fawaz, Rochdi Merzouki, and Belkacem Ould-Bouamama. Intelligent Monitoring of an Industrial Robot. In *9th IFAC Workshop on Intelligent Manufacturing Systems (2008)*, pages 139–144, Poland, 2008b. URL <https://hal.archives-ouvertes.fr/hal-00795304>.
- Belkacem Ould-Bouamama. Supervision of Industrial processes. In *1st Mediterranean Conference on Intelligent Systems and Automation*, Annaba, Algeria, 2008. URL <https://hal.archives-ouvertes.fr/hal-00795324>.
- Khaled Fawaz, Rochdi Merzouki, and Belkacem Ould-Bouamama. Telediagnosis of Transmission Channel and Actuators Faults on a Mobile Robot. In *17th IFAC World Congress*, pages 10510–10515, South Korea, 2008c. URL <https://hal.archives-ouvertes.fr/hal-00795295>.
- Mohand Arab Djeziri, Belkacem Ould-Bouamama, Rochdi Merzouki, and Geneviève Dauphin-Tanguy. Bond Graph Model Based Monitorability Analysis. In *Proceeding 7th France-Japan Congress on mechatronics*, France, 2008b. URL <https://hal.archives-ouvertes.fr/hal-00795276>.

## Conférences plénières

---

1. B. Ould Bouamama. "Coupled Bond graphs for Modelling, for Diagnosis for petrochemical processes" International Conference on advanced engineering in petrochemical industry ICAEPI'17: Nov. 28 – 30/ 2017 Skikda Algérie.. <http://ftch.univ-skikda.dz/icaepi2017/index.php/guest-speaker-s>
2. B. Ould Bouamama "Supervision of Multi-sources Renewable Energy Systems": Event Driven Hybrid Bond Graph approach." IC-AIRES'2017 International Conference on Artificial Intelligence in Renewable Energetic Systems 22-24 Octobre 2017, Tipaza, Algeria <https://www.archeditech.org/keynote-n-4-mustapha-hatti>
3. B. Ould Bouamama "Graphical and Multiphysics Modelling, for Diagnosis and Integrated Design: Theory and Applications", 6th International Conference on System Modeling and Optimizathttp ICSMO, Valenciennes, February, 7-11 2018 <http://www.icsmo.org/kn.html>
4. B. Ould Bouamama "Event- Driven Bond Graphs for robust modelling of continuous and hybrid mechatronic systems", International Conference on Electronics, Control, Optimization and Computer Science (ICECOCS'18) Kenitra Maroc, <http://www.uit.ac.ma/icecocs2018/>
5. B. Ould Bouamama "Model Builder for Supervision System Design" CODIT 2018" 5th International Conference on Control, Decision and Information Technologies, <http://codit2018.com/index.php/keynote-speakers>
6. The 2017 International Conference on Control, Automation and Diagnosis (ICCAD'17) will be held January 19-21, 2017 at Hammamet, Tunisia. Graphical and Multiphysics Modelling, for Diagnosis and Integrated Design: Theory and Applications Prof. Belkacem Ould Bouamama
7. **B. Ould Bouamama.** "Bond Graphs Modelling" 1<sup>st</sup> International and 16<sup>th</sup> National Conference on machines and mechanism (iNaCoMM2013) Roorkee India 18-20 december 2013 "<http://www.nacomm2013.org/confprogramme.html>
8. **B. Ould Bouamama.** Integrated design of industrial diagnosis systems. Colloque international sur le monitoring des systèmes industriels CIMSI'2012 19-20 Décembre 2012 Marrakech, Maroc. <http://www.ensa.ac.ma/cimsi2012/doc/ProgrammeCIMSI1.pdf>
9. **B. Ould Bouamama** Bond Graphs: An Integrating Tool for Design of Mechatronic Systems. IEEE International Multi Conference on Systems, Signals & Devices SSD'2011.
10. **B. Ould Bouamama** Integrated Design of Supervision Systems: Theory and Practice. Plenary lecture. International Conference on Systems and Systems and Information Processing. ICSIP'09, May 2-4 2009, Guelma Algeria
11. **B. Ould Bouamama.** Supervision of Industrial processes. Plenary lecture. 1st Mediterranean Conference on Intelligent Systems and Automation (CISA'08), June 30, July 2, 2008, Annaba, Algeria. [http://lsc.univ-evry.fr/cisa08/doku.php?id=plenary\\_speakers](http://lsc.univ-evry.fr/cisa08/doku.php?id=plenary_speakers)
12. G. Dauphin-Tanguy, **B. Ould Bouamama** and C. Sueur. Bond Graphs for Modelling and Much More. Conference Plenary lecture. International Conference on Bond Graph Modelling and Simulation, ICBGM, New Orleans, USA, 2005.

## Rapports de fin de Contrats industriels

---

1. **B. Ould Bouamama** "Rapport de fin de contrat ANR Propice: prognostic de pile à combustible", 2016

## Liste des Publications de B. Ould Bouamama

2. K. Pushpendra and **B. Ould Bouamama** "*Existing ICT Tools Guide on Private Logistics Organisation. State of the Art*". European Weastflows project 196c 54 pages
3. K. Pushpendra and **B. Ould Bouamama** "*Existing ICT Tools Guide on Private Logistics Organisation. State of the Art*". European Weastflows project 196c 26 pages
4. **B. Ould Bouamama** et M. Djeziri « *Etude de fiabilité d'un système de détection de fuites de fluides en milieu perturbé* » Rapport de fin de contrat Société OSYRIS, 2009, 44 pages.
5. **B. Ould Bouamama** . " *Intégration de Modèles multiples pour la Supervision de Systèmes Non-Stationnaires (IMS\_NS)* ". **Compte** rendu scientifique de fin d'opération (2005-2007), **Projet Régional Actions de Recherche Concertées d'initiative régionale (ARCir)**, 2007, 18pages
6. N. Deram, **B. Ould Bouamama**. "*Diagnostic d'une Pile à Combustible et son environnement. Approche Bond graph*". Rapport de contrat, LAGIS-Sherpa Engineering, 73 pages, Paris, 2006.
7. M. Djeziri, **B. Ould Bouamama**, R. Merzouki. "*Estimation des efforts d'impact pneu-chaussée par l'approche bond graph*" Rapport de contrat, LAGIS-Laboratoire Centrale des Ponts et Chaussée (LCPC Paris), 44 pages, Paris, 2005.
8. **B. Ould Bouamama**, M. Staroswiecki. M. Bayart et al. (sous la direction de R. J. Patton). "*Development and Application of Methods for Actuator Diagnosis in Industrial Control Systems. Mid-Term Reports* ». Department of Engineering, Hull, HU6 7RX United Kingdom. 28 pages (sous la direction de R. J. Patton), **Projet Européen DAMADIC** Contrat : HPRN-CT-2000-00110, 2002.
9. **B. Ould Bouamama**, A. K. Samantaray, K. Medjaher. "*Industrial test of Model Builder Software TB5.1 on the Chemical PROCELL process*", **Projet Européen** CHEM Advanced Decision Support System (DSS) for Chemical/Petrochemical manufacturing processes. Project G1RD-CT-2001-00466 Avril 2001-Avril 2004 IFP Paris. 21 pages, 2004.
10. **B. Ould Bouamama**, A. K. Samantaray, K. Medjaher. "*Industrial test of Model Builder Software TB5.1 on the Fluid Catalytic Cracking Process*", **Projet Européen** IMS CHEM G1RD-CT-2001-00466, IFP Paris. 35 pages, 2004.
11. **B. Ould Bouamama**, A. K. Samantaray, K. Medjaher.. "*Industrial test of Model Builder Software TB5.1 on the steam generator*", **Projet Européen** IMS CHEM G1RD-CT-2001-00466, IFP Paris. 34 p. 2004.
12. **B. Ould Bouamama**, A. K. Samantaray. "*User Manual of Model Builder Software TB5.1*". **Projet Européen** IMS CHEM G1RD-CT-2001-00466, IFP Paris. 22 pages, 2004.
13. **B. Ould Bouamama**, A. K. Samantaray. "*User Manual of Model Builder Software TB5.1*". **Projet Européen** IMS CHEM G1RD-CT-2001-00466, IFP Paris. 22 pages, 2004.
14. **B. Ould Bouamama**, M. Staroswiecki, A. Toguyeni, et al. (sous la direction de S. Cauvin). "*Mid term report*" April 2001-October 2002. **Projet Européen**, IMS CHEM G1RD-CT-2001-00466, IFP Paris. 78 pages, 2002.
15. **B. Ould Bouamama**, A. K. Samantary et M. Staroswiecki.. "*Data Specification XML (eXtended Markup Language) methodology for Toolbox TB5.1*". **Projet Européen** IMS CHEM G1RD-CT-2001-00466, IFP Paris, 2002.
16. **B. Ould Bouamama**. "*Detailed specifications of Toolbox interactions used for steam generator supervision* **Projet Européen** IMS CHEM G1RD-CT-2001-00466, IFP Paris, 13 pages, 2002.
17. **Ould Bouamama**, A. K. Samantary et M. Staroswiecki. "*Detailed specifications of the interactions between the work packages*". **Projet Européen** IMS CHEM G1RD-CT-2001-00466, IFP Paris, 2002, 123 pages.
18. **B. Ould Bouamama**, A. K. Samantary et M. Staroswiecki. "*Document Type Definition (DTD) for the Toolbox TB5.1*". **Projet Européen** IMS CHEM G1RD-CT-2001-00466, IFP Paris,
19. **B. Ould Bouamama**, A. K. Samantary et M. Staroswiecki. "*Methodology of Development of Toolbox TB5.1*". **Projet Européen** IMS CHEM G1RD-CT-2001-00466, IFP Paris, 39 pages.
20. **B. Ould Bouamama**, A. Toguyéni et M. Staroswiecki. "*Design Specifications of Toolbox TB5.1*" **Projet Européen** IMS CHEM G1RD-CT-2001-00466, IFP Paris, 16 pages, 2001
21. **B. Ould Bouamama**, A. Toguyéni et M. Staroswiecki.. "*Basic Functionality Specifications of Toolbox TB5.1*". **Projet Européen** IMS CHEM G1RD-CT-2001-00466, IFP Paris, 13 pages.
22. Niesner C., **B. Ould Bouamama** et Dauphin-Tanguy G.. "*Modélisation et simulation d'un générateur électrique utilisant une pile à combustible à l'aide de l'outil bond graph*". **Contrat industriel, CEA**. 60 pages Septembre 2002.
23. Maligorne M., **B. Ould Bouamama** et Dauphin-Tanguy G. "*Conception d'une bibliothèque de modèles thermofluide à l'aide de l'approche Bond Graph*". **Contrat avec Engineering**. 50 pages,

## Liste des Publications de B. Ould Bouamama

- Septembre 2000.
24. Craye E., A.L. Gehin, **B. Ould Bouamama**, M. Staroswiecki et A. Toguyeni. "*Modélisation du RCV (circuit de contrôle volumétrique) et filtrage d'alarmes Partie II: Approche Bond graph*" **Contrat industriel avec EDF : Filtrage d'alarme (Mai 1996-Mai 1999)**: P31/BO2970/EP885, 99 pages, Juin 1999.
  25. Craye E. A.L. Gehin, **B. Ould Bouamama**, M. Staroswiecki et A. Toguyeni. "*Analyse du système de réfrigération intermédiaire (SRI) et filtrage d'alarmes. Partie II : traitement des alarmes du SRI par les modèles externes et Bond Graphs*". **Contrat EDF**, P31/BO2970/EP885 78 pages, 1998.
  26. Craye E., A.L. Gehin, **B. Ould Bouamama**, M. Staroswiecki et A. Toguyeni. "*Proposition de méthodologies de modélisation en vue du filtrage d'alarmes : Apport de l'outil Bond Graph*" **contrat EDF**, P31L19/6A2224/EP824, 116 pages, LAIL, Décembre 1997.
  27. Craye E., A.L. Gehin, **B. Ould Bouamama**, M. Staroswiecki et A. Toguyeni." *Analyse bibliographique et Synthèse de filtrage d'alarmes en industries et laboratoires*". **Contrat EDF**, P31L19/6A2224/EP824 , 80 pages, Juin 1997.
  28. Rimaux S., **B. Ould Bouamama** et G. Dauphin-Tanguy. "*Simulation du modèle Bond Graph du REP 900. Simulation*". Contrat industriel EDF : Modélisation par Bond Graph d'une centrale (Septembre 1995-Juin 1997) n° P33/2M3502/EP732, 76 pages, Juin 1997.
  29. Rimaux S., **B. Ould Bouamama** et G. Dauphin-Tanguy. "*Approche du modèle Lilliam par bond*" **graph. Contrat EDF** n° P33/2M3502/EP732, ECL-EDF, LAIL, URA CNRS 1440, 73 pages, Janvier 1996.

## Publications pédagogiques

---

Tous les supports des cours que j'assume sont consultables et téléchargeables sur le site <https://wikis.univ-lille1.fr/ci2s/membres/belkacem-ould-bouamama>