

Curriculum Vitae

First name : Fakher
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Position : Professor in Mechanical Engineering
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Teaching experience

- 2002-2004 : Part time associate professor at the National School of Engineers of Sfax – Tunisia (www.enis.rnu.tn)
- 2004 – 2006 : Full time associate professor at the High Institute Of Applied Sciences And Technology of Sousse - Tunisia (www.issatso.rnu.tn)
- From September 2006 : Full time Professor at the National School of Engineers of Sfax- Tunisia

Teaching activity

- Dynamics of structures
- Machine elements
- Power transmissions
- Computer aided design
- Dynamics of machines
- Instrumentation
- Numerical analysis

Research activity

- h-index : 14
- Main Topic : Dynamics and fault detection of rotating machinery
 - Spur gears
 - Helical gears
 - Epicyclic gear trains
 - Cam-follower systems
 - Nonlinear dynamic absorbers
- Supervision of 7 PhD thesis and 10 MSc
- International cooperation with several European research labs : University of Cantabria-Spain, INSA Lyon-France, Wroclaw University of Technology-Poland, AGH Krakow-Poland, IIT Indore, India...

Scientific publications

➤ *Books*

- Haddar, M., Bartelmus, W., Chaari, F., Zimroz, R., Applied Condition Monitoring, Book series, Springer
ISSN: 2363-698X
<http://www.springer.com/series/13418>

- Fakhfakh, T.; Bartelmus, W.; Chaari, F.; Zimroz, R.; Haddar, M., Condition Monitoring of Machinery in Non-Stationary Operations - Proceedings of the second International Conference “Condition monitoring of Machinery in non-stationary operations”
ISBN 978-3-642-28768-8
<http://www.springerlink.com/content/978-3-642-28767-1#section=1049536&page=1>

- Dalpiaz, G.; Rubini, R.; D'Elia, G.; Coconcelli, M.; Chaari, F.; Zimroz, R.; Bartelmus, W.; Haddar, M., Advances in Condition monitoring of Machinery in Non-Stationary Operations” - Proceedings of the third International Conference Condition Monitoring of Machinery in Non-Stationary Operations CMMNO'2013.
ISBN 978-3-642-39348-8
<http://www.springer.com/engineering/mechanical+engineering/book/978-3-642-39347-1>

- Chaari, F.; Leśkow, J.; Napolitano, A.; Sanchez-Ramirez, A., Cyclostationarity: Theory and Methods, Series: Lecture Notes in Mechanical Engineering, Springer
ISBN 978-3-319-04186-5
<http://www.springer.com/engineering/mechanical+engineering/book/978-3-319-04186-5>

- Mohamed Slim Abbes, Jean-Yves Choley, Fakher Chaari, Abdesslem Jarraya, Mohamed Haddar, Mechatronic Systems: Theory and Applications, Series: Lecture Notes in Mechanical Engineering, Springer
ISBN: 978-3-319-07169-5
<http://www.springer.com/engineering/robotics/book/978-3-319-07169-5>

- Haddar, M., Abbes, M.S., Choley, J.-Y., Boukharouba, T., Elnady, T., Kanaev, A., Ben Amar, M., Chaari, F., Multiphysics Modelling and Simulation for Systems Design and Monitoring, Series: Applied Condition Monitoring, Springer
ISBN : 978-3-319-14532-7
<http://www.springer.com/engineering/mechanical+engineering/book/978-3-319-14531-0>

- Chaari, F., Leśkow, J., Napolitano, A., Zimroz, R., Wylomanska, A., Dudek, A., Cyclostationarity: Theory and Methods - II, Series: Applied Condition Monitoring, Springer
ISBN 978-3-319-04186-5
<http://www.springer.com/engineering/mechanical+engineering/book/978-3-319-16329-1>

Chouchane, M., Fakhfakh, T., Daly, H.B., Aifaoui, N., Chaari, Design and Modeling of Mechanical Systems – II, Proceedings of the Sixth Conference on Design and Modeling of Mechanical Systems, CMSM'2015, March 23-25, Hammamet, Tunisia, Series: Lecture Notes in Mechanical Engineering, Springer

ISBN 978-3-319-17527-0

<http://www.springer.com/us/book/9783319175263>

- Chaari, F., Zimroz, R., Bartelmus, W., Haddar, M., Advances in Condition Monitoring of Machinery in Non-Stationary Operations, Proceedings of the Fourth International Conference on Condition Monitoring of Machinery in Non-Stationary Operations, CMMNO'2014, Lyon, France December 15-17. Series: Applied Condition Monitoring, Springer
ISBN 978-3-319-20463-5
<http://www.springer.com/us/book/9783319204628>
- Fakhfakh, T., Chaari, F., Walha, L., Abdennadher, M., Abbes, M.S., Haddar, M., Advances in Acoustics and Vibration, Proceedings of the International Conference on Acoustics and Vibration (ICAV2016), March 21-23, Hammamet, Tunisia, Series: Applied Condition Monitoring, Springer
ISBN 978-3-319-41459-1
<http://www.springer.com/us/book/9783319414584>
- Chaari, F., Leskow, J., Napolitano, A., Zimroz, R., Wylomanska, A., Cyclostationarity: Theory and Methods III, Contributions to the 9th Workshop on Cyclostationary Systems and Their Applications, Grodek, Poland, 2016, Springer Series: Applied Condition Monitoring, Vol. 6, 2017
ISBN 978-3-319-51445-1
<http://www.springer.com/gp/book/9783319514444>

➤ *Articles*

- 1- Fakhfakh T., Chaari F., Haddar M., « Numerical and experimental analysis of gear system with teeth defects », International Journal of Advanced Manufacturing Technology (IJAMT), vol. 25, 2005, p. 542-550.
- 2- Chaari F., Fakhfakh T., Haddar M., « Simulation numérique du comportement dynamique d'une transmission par engrenages en présence de défauts de denture », *Mécanique et Industries*, vol. 6, 2006, p. 625–633.
- 3- Chaari F., Hbaieb R., Louati J., Fakhfakh T., Haddar M., « Influence of manufacturing errors on the dynamical behavior of planetary gear », International Journal of Advanced Manufacturing Technology (IJAMT), vol. 27, 2006, p 738-746.
- 4- Chaari F., Hbaieb R., Fakhfakh T., Haddar M., « Dynamic response simulation of planetary gears by the iterative spectral method », International Journal of Simulation Modelling (IJSIMM), vol. 4, n°1, 2005, p. 35-45.
- 5- Chaari F., Fakhfakh T., Haddar M., « Dynamic analysis of a planetary gear failure caused by tooth pitting and cracking » , *Journal of Failure Analysis and Prevention*, vol. 6, v°2, 2006, p. 73-78.
- 6- Chaari F., Fakhfakh T., Haddar M., « Analytical investigation on the effect of gear teeth faults on the dynamic response of a planetary gear set », *Noise and Vibration Worldwide*, vol. 37, n° 8, 2006, p. 9-15

- 7- Hbaieb R. Chaari F., Fakhfakh T., Haddar M., « Three dimensional Model for a Helical planetary gear train vibration analysis » , *International Journal of Engineering Simulation*, vol. 6, n°3, 2005, p. 32-38.
- 8- Hbaieb R. Chaari F., Fakhfakh T., Haddar M., « Influence of eccentricity, profile error and tooth pitting on Helical planetary gear vibration » , *Machine Dynamics Problems*, vol. 29, n°3, 2006, p. 5-32.
- 9- Siala W. Chaari F., Fakhfakh T., Haddar M., « Dynamical behaviour of a multi-stage epicyclic gear train, *Machine Dynamics Problems* », vol. 31, n°1, 2007, p. 82-100.
- 10- Chaari F., Trabelsi H., Fakhfakh T., Haddar M., « Influence of cam profile errors on the Dynamic Behaviour of a cam follower system » , *Journal of Theoretical and Applied Mechanics*, vol. 37, n°4, 2007, p. 3-14.
- 11- Chaari F., Baccar W., Haddar, M., « Effect of spalling or tooth breakage on gearmesh stiffness and dynamic response of a one-stage spur gear transmission » , *European Journal of Mechanics A/ Solids*, vol. 27, n° 4, 2008, p. 691-705
- 12- Abbes M.S., Bouaziz S., Chaari F., Maatar M., Haddar M., « An acoustic-structural interaction modelling for the evaluation of a gearbox radiated noise » , *International Journal of Mechanical Sciences*, vol. 50, n° 3, 2008, p. 569-577
- 13- Dhoub S., Hbaieb R., Chaari F., Abbes M.S., Fakhfakh T., Haddar M., « Free vibration characteristics of compound planetary gear train sets » , *Proceedings of the Institution of Mechanical Engineers, Part C: Journal of Mechanical Engineering Science*, vol. 222, n° 8, 2008, p. 1389-1401
- 14- Chaari F., Letaief M.R., Haddar M., « Dynamic behaviour of thin rimmed internal gear system » , *Journal of Theoretical and Applied Mechanics*, vol. 38, n° 4, 2008, p. 3-22
- 15- Chaari F., Fakhfakh T., Haddar M., « Analytical modelling of spur gear tooth crack and influence on gearmesh stiffness » , *European Journal of Mechanics - A/Solids*, vol. 28, n° 3, 2009, p. 461-468.
- 16- M. Tounsi, R. Hbaieb, F. Chaari, T. Fakhfakh and M. Haddar, Dynamic stability analysis of a flexible cam mechanism using one-degree-of-freedom model, *Proceedings of the Institution of Mechanical Engineers, Part C: Journal of Mechanical Engineering Science*, vol. 222, n° 8, 2008, pp. 1389-1401.
- 17- G. Kantchev, W. Baccar, F. Chaari, M. Haddar, « Analytical Computation of the Mechanical Efficiency of Compound Mechanical Systems » , *Machine Dynamics Problems*, Vol 33, No1, pp. 55-75, 2009.
- 18- F. Chaari, G. Kantchev, M. Haddar, « Numerical computation of the mechanical efficiency of a spur gear system » , *Engineering and Computational Mechanics*, Vol. 163 Issue EM2, 2010, pp. 83-90.
- 19- Bartelmus W., Chaari F., Zimroz R., Haddar M., « Modelling of gearbox dynamics under time varying non-stationary operation for distributed fault detection and diagnosis » , *European Journal of Mechanics - A/Solids*, Vo 29, No 4, 2010, pp.637-646.
- 20- Abbes M.S., Trigui M. Chaari F. Fakhfakh T., Haddar M., « Dynamic behaviour modelling of a flexible gear system by the elastic foundation theory in presence of defects » , *European Journal of Mechanics - A/Solids*, Volume 29 (5), pp. 887-896, 2010.
- 21- M. Tounsi, F. Chaari, M. S. Abbes, T. Fakhfakh, M. Haddar, « Failure Analysis of a Cam-Follower System Affected by a Crack » , *Journal of Failure Analysis and Prevention*, 2011, Vol. 11, n°1, pp. 41-50, 2010.
- 22- M. Tounsi, F. Chaari, M. S. Abbes, T. Fakhfakh, M. Haddar, « Effect of camshaft eccentricity and follower backlash on the dynamic behaviour flexible cam mechanism, *Diagnostyca* 2(54), pp. 3-9, 2010.
- 23- M. Tounsi, F. Chaari, L. Walha, T. Fakhfakh, M. Haddar, « Dynamic behaviour of a valve train system in presence of camshaft errors, *WSEAS Transactions on Theoretical and Applied Mechanics*, Issue 1, Volume 6, (2011), pp.17-26.

- 24- N. Bouchaala, F. Chaari, M.T. Khabou, T. Fakhfakh and M. Haddar, « Influence of the nonlinear Hertzian stiffness on the dynamics of a spur gear system under transient regime and tooth defects », *International Journal of Vehicle Noise and Vibration*, Vol. 7 N°2, pp. 149-177, 2011.
- 25- Khabou M.T., Bouchaala N., Chaari F., Fakhfakh T., Haddar « Study of a Spur Gear Dynamic Behavior in Transient Regime », *Mechanical Systems and Signal Processing*, Vol. 25, N°8, pp. 3089–3101.
- 26- Chaari F., Bartelmus W., Zimroz R., Fakhfakh T., Haddar M., « Gearbox vibration signal amplitude and frequency modulation », *Journal Shock and Vibration*, Vol. 19, pp. 635-652.
- 27- M. T. Khabou, T. Hentati, M.S. Abbes, F. Chaari and M. Haddar, « Nonlinear modeling and simulation of spur gear with defected bearings », *Multidiscipline Modeling in Materials and Structures (MMMS)*, Vol.8 issue 2, pp. 197-212, 2012.
- 28- O. Ksentini, M.S. Abbes, A. Jarraya, Chaari F., Haddar M., Study of Mass Spring System Subjected to Dahl Friction, *International Journal of Mechanic Systems Engineering (IJMSE)*, Vol. 2, No. 1, 2012, pp. 34-41.
- 29- Fakher Chaari, Manel Ben Romdhane, Walid Baccar, Taher Fakhfakh, Mohamed Haddar, Windage Power Loss In Spur Gear Sets, *WSEAS Transactions on Applied and Theoretical Mechanics*, Vol.7 (2), 2012, pp. 159-168.
- 30- Fakher Chaari, Walter Bartelmus, Radoslaw Zimroz, Taher Fakhfakh and Mohamed Haddar, Effect of load shape in cyclic load variation on dynamic behavior of spur gear system, *Key Engineering Materials* Vol. 518 (2012) pp 119-126.
- 31- Zineb El Ouehabi, Fakher Chaari, Hassane Lahmam, Bouazza Braikat, Hicham Mottaoui, Tahar Fakhfakh, Mohamed Haddar, Noureddine Damil, Un algorithme implicite d'ordre élevé pour la dynamique des systèmes d'engrenages utilisés dans les machines tournantes, *Revue de Mécanique Appliquée et Théorique*, Vol. 2, 5. 455-464 (2011)
- 32- Chaari, F, Abbes, M.S, Rueda, F.V., del Rincon, A.F., Haddar, M., Analysis of planetary gear transmission in non-stationary operations, *Frontiers of Mechanical Engineering* March 2013, Volume 8, Issue 1, pp 88-94
- 33- Walha Lassaad, Tounsi Mohamed, Driss Yassine, Chaari Fakher, Fakhfakh Taher, Haddar Mohamed, Nonlinear dynamic behaviour of a cam mechanism with oscillating roller follower in presence of profile error, *Frontiers of Mechanical Engineering*, June 2013, Volume 8, Issue 2, pp 127-136
- 34- Chokri Abdelmoula, Fakher Chaari, Mohamed Masmoudi, Real Time Algorithm implemented in Altera's FPGA for a Newly Designed Mobile Robot: Autonomous Navigation and Parallel Parking, *Multidiscipline Modeling in Materials and Structures (MMMS)*, Vol.10 issue 1, 2014.
- 35- Fathi Djemal, Fakher Chaari, Jean-Luc Dion, Franck Renaud, Imad Tawfiq, Mohamed Haddar, Performance of a non linear dynamic vibration absorbers, *Journal of Mechanics*, <http://dx.doi.org/10.1017/jmech.2014.76>, 2014
- 36- Fathi Djemal, Fakher Chaari, Jean-Luc Dion, Franck Renaud, Imad Tawfiq, Mohamed Haddar, Asymptotic numerical method for the dynamic study of nonlinear vibration absorbers, *International Journal of Applied Mechanics*, Volume 06, Issue 05, pp. 1450053-1 - 1450053-18, 2014.
- 37- Mohamed Taoufik Khabou, Olfa ksentini, abdessalem Jarraya, Mohamed Slim Abbes, Fakher Chaari, Mohamed Haddar, « Influence of disk brake friction on the dynamic behaviour of a directly coupled spur gear transmission », *Multidiscipline Modeling in Materials and Structures*, Vol. 10(2) pp. 146 – 162, 2014.
- 38- A.Hammami, A. Fernandez Del Rincon, F. Chaari, F. Viadero Rueda, M. Haddar, Dynamic behaviour of back to back planetary gear in run up and run down transient regimes *Journal of Mechanics*, DOI10.1017/jmech.2014.95, 2014.

- 39- Ahmed Hammami, Alfonso Fernandez Del Rincon, Fernando Viadero Rueda, Fakher Chaari, Mohamed Haddar, Modal analysis of back-to-back planetary gear: experiments and correlation against lumped parameter model, *Journal of Theoretical and Applied Mechanics*, Vol. 53, Issue 1, pp. 125-138, 2015.
40. Riadh Chaari, Mohamed Taoufik Khabou, Maher Barkallah, Fakher Chaari, Mohamed Haddar, Dynamic analysis of gearbox behaviour in milling process: Non-stationary operations, *Proceedings of the Institution of Mechanical Engineers, Part C: Journal of Mechanical Engineering Science*, 0954406215590170, first published on June 8, 2015
41. Riadh Chaari, Fathi Djemal, Fakher Chaari, Mohamed Slim Abbes, and Mohamed Haddar Experimental study of passive vibration suppression using absorber with spherical ball impact damper, *Proceedings of the Institution of Mechanical Engineers, Part C: Journal of Mechanical Engineering Science*, 0954406216643342, first published on April 6, 2016
42. Maha Karray, Nabih Feki, Mohamed Taoufik Khabou, Fakher Chaari, Mohamed Haddar, Modal analysis of gearbox transmission system in Bucket wheel excavator, *Journal of Theoretical and Applied Mechanics*, Accepted for publication, 2016.
43. Ahmed Hammami, Alfonso Fernandez Del Rincon, Fakher Chaari, Miguel Iglesias Santamaria, Fernando Viadero Rueda, Mohamed Haddar, Effects of variable loading conditions on the dynamic behaviour of planetary gear with power recirculation, *Measurement*, Volume 94, 2016, Pages 306-315.
44. Maha Karray, Nabih Feki, Mohamed Taoufik Khabou, Fakher Chaari, Mohamed Haddar, Modal analysis of gearbox transmission system in bucket wheel excavator, *Journal of Theoretical and Applied Mechanics*, Vol. 55, 1, pp. 253-264, 2017
45. Aroua Fourati, Adeline Bourdon, Nabih Feki, Didier Rémond, Fakher Chaari, Mohamed Haddar, Angular-based modeling of induction motors for monitoring, *Journal of Sound and Vibration*, Volume 395, 2017, Pages 371-392
46. Fares Mezghani, Alfonso Fernández Del Rincón, Mohamed Amine Ben Souf, Pablo García Fernandez, Fakher Chaari, Fernando Viadero Rueda, Mohamed Haddar, Identification of nonlinear anti-vibration isolator properties, *Comptes Rendus Mécanique*, Volume 345, Issue 6, June 2017, Pages 386-398.
47. Wajih Gafsi, Riadh Chaari, Nouha Masmoudi, Mohamed Taoufik Khabou, Fakher Chaari, Mohamed Haddar, Modeling of a passive absorber in milling tool machine, *Applied Acoustics*, Volume 128, 15 December 2017, Pages 94-110.
48. Ayoub Mbarek, Ahmed Hammami, Alfonso Fernandez Del Rincon, Fakher Chaari, Fernando Viadero Rueda, Mohamed Haddar, Effect of load and meshing stiffness variation on modal properties of planetary gear, *Applied Acoustics*, Available online 18 August 2017
49. Atef Hmida, Ahmed Hammami, Mohamed Taoufik Khabou, Fakher Chaari, Mohamed Haddar, Effect of elastic coupling on the modal characteristics of spur gearbox system, *Applied Acoustics*, In press, Available online 28 June 2017
50. Fathi Djemal, Riadh Chaari, Wajih Gafsi, Fakher Chaari, Mohamed Haddar, Passive vibration suppression using ball impact damper absorber, *Applied Acoustics*, In press, Available online 25 September 2017
51. Nabih Feki, Maha Karray, Mohamed Tawfik Khabou, Fakher Chaari, Mohamed Haddar, Frequency analysis of a two-stage planetary gearbox using two different methodologies, *Comptes Rendus Mécanique*, Volume 345, Issue 12, 2017, Pages 832-843
52. Dorra Ben Hassen, Mariem Miladi, Mohamed Slim Abbes, S. Caglar Baslamisli, Fakher Chaari, Mohamed Haddar, Road profile estimation using the dynamic responses of the full vehicle model, *Applied Acoustics*, In press, Available online 26 December 2017

53. Haddar, M., Baslamisli, S.C., Chaari, R., Chaari, F., Haddar, M., Road profile identification with an algebraic estimator, Proceedings of the Institution of Mechanical Engineers, Part C: Journal of Mechanical Engineering Science, accepted, 2018
54. Mbarek, A., Del Rincon, A.F., Hammami, A., Chaari, F., Viadero, F., Haddar, M., Comparison of experimental and operational modal analysis on a back to back planetary gear, Mechanism and Machine Theory, Volume 124, June 2018, Pages 226-247

➤ **Book chapters**

- 1- F. Chaari, R. Zimroz, W. Bartelmus, T. Fakhfakh, and M. Haddar, Model Based Investigation on a Two Stages Gearbox Dynamics under Non-stationary Operations, Condition Monitoring of Machinery in Non-Stationary Operations, pp 133-142, 2012, Springer. *Proceedings of the Second International Conference, Condition Monitoring of Machinery in non-Stationary Operations CMMNO'2012*, 26-28 March 2012.
- 2- N. Bouchaala, M. T. Khabou, F. Chaari, T. Fakhfakh, and M. Haddar, Influence of the Acyclism on the Dynamics of a Spur Gear System, Condition Monitoring of Machinery in Non-Stationary Operations, pp 125-132, 2012, Springer. *Proceedings of the Second International Conference, Condition Monitoring of Machinery in non-Stationary Operations CMMNO'2012*, 26-28 March 2012.
- 3- Maha Karray, Fakher Chaari, Fernando Viadero Rueda, Alfonso Fernandez del Rincon, Mohamed Haddar, Dynamic analysis of a single stage bevel gear transmission in presence of geometrical errors, 9th International Conference on Condition Monitoring and Machinery Failure Prevention Technologies, 12-14 June 2012, London, UK.
- 4- M. Karray, F. Chaari, F. Viadero, A. Fdez. del Rincon, M. Haddar, Dynamic Response of Single Stage Bevel Gear Transmission in Presence of Local Damage, New Trends in Mechanism and Machine Science, Mechanisms and Machine Science Volume 7, 2013, pp 337-345, Springer. *Proceedings of the 4th European Conference on Mechanism Science*, 18-22 September, 2012, Santander, Spain.
- 5- M. S. Feki, F. Chaari, M. S. Abbes, F. Viadero, A. Fdez. del Rincon, M. Haddar, Dynamic Analysis of Planetary Gear Transmission Under Time Varying Loading Conditions, New Trends in Mechanism and Machine Science, Mechanisms and Machine Science, Volume 7, 2013, pp 311-318, Springer. *Proceedings of the 4th European Conference on Mechanism Science*, 18-22 September, 2012, Santander, Spain.
- 6- Maha Karray, Fakher Chaari, Alfonso Fernandez Del Rincon, Fernando Viadero, Mohamed Haddar, An Experimental Investigation of the Dynamic Behavior of Planetary Gear Set, Design and Modeling of Mechanical Systems, Lecture Notes in Mechanical Engineering, Springer, 2013, pp 199-206. *Poceedings of the 5th International Conference Design and Modelling of Mechanical Systems CMSM'2013*, 25-27 March 2013, Djerba - Tunisia
- 7- Ahmed Hammami, Alfonso Fernández del Rincón, Fakher Chaari, Fernando Viadero Rueda, Mohamed Haddar, “Instrumentation of Back to Back Planetary Gearbox for Dynamic Behavior Investigation”, Mechatronic Systems: Theory and Applications, Lecture Notes in Mechanical Engineering 2014, pp 23-35, *proceedings of the second Workshop on mechatronic systems*, 17-19 March 2014, Mahdia Tunisia,
- 8- Fakher Chaari, Mohamed Haddar, Modeling of Gear Transmissions Dynamics in Non-stationary Conditions, Cyclostationarity: Theory and Methods, Springer Lecture Notes in Mechanical Engineering, *proceedings of the sixth Workshop on cyclostationary systems and their applications*, 2014, pp 109-124

- 9- Maha Karray, Nabih Feki, Fakher Chaari, Mohamed Haddar, Modal Analysis of Helical Planetary Gear Train Coupled to Bevel Gear, *Mechatronic Systems: Theory and Applications*, Springer Lecture Notes in Mechanical Engineering, pp 149-158, *proceedings of the second Workshop on mechatronic systems*, 17-19 March 2014, Mahdia Tunisia,
- 10- M. Karray, F. Chaari, A. Fernandez Del Rincon, F. Viadero, M. Haddar, Modulation sidebands of Planetary Gear Set, *Advances in Condition Monitoring of Machinery in Non-Stationary Operations*, Springer Lecture Notes in Mechanical Engineering 2014, pp 217-224, *proceedings of the third International Conference "Condition Monitoring of Machinery in non-Stationary Operations" CMMNO'2013*, 8-10 May 2013.
- 11- M. Karray, N. Feki, F. Chaari, M. Haddar, Dynamic analysis of high power gear transmission system in bucket wheel excavator, *Proceedings of the International Gear Conference 2014*, Elsevier-WP, pp. 606-614, Lyon 26-28 August 2014.
- 12- A. Hammami, A. Fernandez Del Rincon, F. Viadero, F. Chaari, N. Feki, M. Haddar, Back to back planetary gearbox: Influence of non-stationary operating, *Proceedings of the International Gear Conference 2014*, Elsevier-WP, pp. 896-904, Lyon 26-28 August 2014.
- 13- Ahmed Hammami, Miguel Iglesias Santamaria, Alfonso Fernandez Del Rincon, Fakher Chaari, Fernando Viadero Rueda, Mohamed Haddar, Load Sharing Behavior in Planetary Gear Set, *Multiphysics Modelling and Simulation for Systems Design and Monitoring, Applied Condition Monitoring Volume 2*, 2015, pp 459-468, Springer. *Proceedings of the first International Conference Multiphysics Modelling and Simulation for Systems Design MMSSD'2014*, 17-19 December 2014 – Sousse – Tunisia.
- 14- Aroua Fourati, Nabih Feki, Adeline Bourdon, Didier Rémond, Fakher Chaari and Mohamed Haddar, « Electrical Modeling for Faults Detection Based on Motor Current Signal Analysis and Angular Approach », *Advances in Condition Monitoring of Machinery in Non-Stationary Operations, Applied Condition Monitoring 4*, Springer DOI 10.1007/978-3-319-20463-5_2, *Proceedings of the fourth International Conference "Condition Monitoring of Machinery in non-Stationary Operations" CMMNO'2014*, 15-16 December 2014, Lyon, France.
- 15- Cristián Molina Vicuña, Fakher Chaari, « Analysis of a Planetary Gearbox Under Non-stationary Operating Conditions: Numerical and Experimental Results », *Advances in Condition Monitoring of Machinery in Non-Stationary Operations, Applied Condition Monitoring 4*, Springer DOI 10.1007/978-3-319-20463-5_2, *Proceedings of the fourth International Conference "Condition Monitoring of Machinery in non-Stationary Operations" CMMNO'2014*, 15-16 December 2014, Lyon, France.
- 16- Abdelmonem Masmoudi, Fathi Djemal, Fakher Chaari, Bassem Zouari, « Damping Analysis of GFRP Bars », *Design and Modeling of Mechanical Systems – II*, Lecture Notes in Mechanical Engineering , Springer 2015, pp 609-614. *Proceedings of the sixth International Congress "Design and Modeling of Mechanical Systems" CMSM'2015*, 23-25 Mars 2015- Hammamet – Tunisie.
- 17- H. Mahgoun , Fakher Chaari, A. Felkaoui, Mohamed Haddar, Early Detection of Gear Faults in Variable Load and Local Defect Size Using Ensemble Empirical Mode Decomposition (EEMD), *Advances in Acoustics and Vibration, Advances in Acoustics and Vibration, Proceedings of the International Conference on Acoustics and Vibration (ICAV2016)*, March 21-23, 2016 Hammamet, Tunisia Volume 5 of the series Applied Condition Monitoring pp 13-22, Springer.

- 18- Dorra Ben Hassen , Mariem Miladi, Mohamed Slim Abbes, S. Caglar Baslamisli, Fakher Chaari, Mohamed Haddar, Application of the Operational Modal Analysis Using the Independent Component Analysis for a Quarter Car Vehicle Model, *Advances in Acoustics and Vibration, Proceedings of the International Conference on Acoustics and Vibration (ICAV2016)*, March 21-23, 2016 Hammamet, Tunisia Volume 5 of the series Applied Condition Monitoring pp 125-133, Springer.
- 19- Ahmed Hammami , Alfonso Fernandez Del Rincon, Fakher Chaari, Fernando Viadero Rueda, Mohamed Haddar, Planet Load Sharing Behavior During Run Up, *Advances in Acoustics and Vibration, Proceedings of the International Conference on Acoustics and Vibration (ICAV2016)*, March 21-23, 2016 Hammamet, Tunisia Volume 5 of the series Applied Condition Monitoring pp 165-173, Springer.

➤ *Conference papers*

- 1- Fakhfakh T., Chaari F., Haddar M., « Etude Numérique et expérimentale du comportement dynamique d'une transmission par engrenages en présence de défauts de denture », *16^{ième} Congrès Français de Mécanique (CFM)*, 1-5 Septembre 2003, Nice, France.
- 2- Chaari F., Hbaieb R., Fakhfakh T., Haddar M., « Analyse vibratoire des trains épicycloïdaux compte tenu de l'effet gyroscopique », *1^{ières} Journées Scientifiques et Pédagogiques de Mécanique et énergétique (JSPME)*, p. 19-26, 1-3 Décembre 2003, Gafsa, Tunisia.
- 3- Chaari F., Fakhfakh T., Haddar M., « Effect of tooth defects on the dynamic behavior of single-stage spur gear system », *International Conference on Mechanical design and Production (MDP-8)*, p. 31-39, 4-6 January 2004, Le Caire, Egypte.
- 4- Chaari F., Hbaieb R., Fakhfakh T., Haddar M., « Modal analysis of a one stage planetary gear », *International Conference on Advances on Mechanical Engineering (ICAME-2004)*, 24-26 March 2004, Sousse, Tunisie.
- 5- Chaari F., Hbaieb R., Fakhfakh T., Haddar M., « Influence of eccentricity and tooth faults on the dynamic behavior of a planetary gear » *International Congress on Acoustics (ICA)*, 4-9 April 2004, Japon.
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Editorial experience

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<http://www.springer.com/series/13418>
- Applied Acoustics (APAC) special issue from the second edition of the conference “Condition monitoring of Machinery in non-stationary operations” CMMNO’2012,
<http://www.sciencedirect.com/science/article/pii/S0003682X13002636>
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