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Education

- 2009-2014 **University of Bath, Uk**, PhD in Laser Physics and Nonlinear Optics.
- 2006-2007 **University of St-Andrews**, MSc. in “Photonics and Optoelectronics Devices”.
- 1999-2003 **King Saud University, Saudi Arabia**, BSc. in Physics.

Work Experience

- 2015- Present Assistant Professor at Physics and Astronomy department and vice director of “Attosecond Science Laboratory (ASL)” at King Saud University.
- 2007-2008 Laboratory Demonstrator at Physics and Astronomy department in King Saud University.
- 2004-2005 Laboratory Demonstrator at Physics and Astronomy department in King Saud University.
- 2003-2004 3D-Lab technician with Saudi Arabia Standards Organization (SASO) at their central labs in Riyadh, Saudi Arabia.

Publications

- 1) **Alharbi, M.**, Husakou, A., Chafer, M., Debord, B., G r me, F., & Benabid, F. (2016). Raman gas self-organizing into deep nano-trap lattice. *Nature Communications*, 7, 12779. Retrieved from <http://dx.doi.org/10.1038/ncomms12779>
- 2) Y. Y. Wang, Xiang Peng, **M. Alharbi**, C. Fourcade Dutin, T. D. Bradley, F. G r me, Michael Mielke, Timothy Booth, and F. Benabid, "Design and fabrication of hollow-core photonic crystal fibers for high-power ultrashort pulse transportation and pulse compression," *Opt. Lett.* 37, 3111-3113 (2012)

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 - 4) M. Alharbi, T. Bradley, B. Debord, C. Fourcade-Dutin, D. Ghosh, L. Vincetti, F. Gérôme, and F. Benabid, "Hypocycloid-shaped hollow-core photonic crystal fiber Part II: Cladding effect on confinement and bend loss," *Opt. Express* 21, 28609-28616 (2013)
 - 5) B. Debord, M. Alharbi, A. Benoît, D. Ghosh, M. Dontabactouny, L. Vincetti, J.-M. Blondy, F. Gérôme, and F. Benabid, "Ultra low-loss hypocycloid-core Kagome hollow-core photonic crystal fiber for green spectral-range applications," *Opt. Lett.* 39, 6245-6248 (2014)
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 - 7) B. Beaudou, F. Gérôme, Y. Y. Wang, M. Alharbi, T. D. Bradley, G. Humbert, J.-L. Auguste, J.-M. Blondy, and F. Benabid, "Millijoule laser pulse delivery for spark ignition through kagome hollow-core fiber," *Opt. Lett.* 37, 1430-1432 (2012)
 - 8) Aurélien Benoît, Benoit Beaudou, Meshaal Alharbi, Benoit Debord, Frédéric Gérôme, François Salin, and Fetah Benabid, "Over-five octaves wide Raman combs in high-power picosecond-laser pumped H₂-filled inhibited coupling Kagome fiber," *Opt. Express* 23, 14002-14009 (2015)
 - 9) FA Benabid, F Gérôme, B Debord, M Alharbi, "Fiber For Fiber Lasers: Kagome PC fiber goes to extremes for ultrashort-pulse lasers", *Laser Focus World*, 29, 2014.
 - 10) Benoit Debord ; Abhilash Amsanpally ; Meshaal Alharbi ; Luca Vincetti ; Jean-Marc Blondy ; Frédéric Gérôme ; Fetah Benabid, "Ultra-Large Core Size Hypocycloid-Shape Inhibited Coupling Kagome Fibers for High-Energy Laser Beam Handling," in *Journal of Lightwave Technology*, vol. 33, no. 17, pp. 3630-3634, Sept.1, 1 2015.
 - 11) B. Beaudou ; A. Bhardwaj ; T. D. Bradley ; M. Alharbi ; B. Debord ; F. Gerome ; F. Benabid, "Macro Bending Losses in Single-Cell Kagome-Lattice Hollow-Core Photonic Crystal Fibers," in *Journal of Lightwave Technology*, vol. 32, no. 7, pp. 1370-1373, April1, 2014.
 - 12) T D Bradley, E Ilinova, J J McFerran, J Jouin, B Debord, M Alharbi, P Thomas, F Gérôme and F Benabid, "Ground-state atomic polarization relaxation-time measurement of Rb filled hypocycloidal core-shaped Kagome HC-PCF" *Journal of Physics B: Atomic, Molecular and Optical Physics*, Volume 49, Number 18, September 2016.
 - 13) A. V. V. Nampoothiri, B. Debord, M. Alharbi, F. Gérôme, F. Benabid, and W. Rudolph, "CW hollow-core optically pumped I₂ fiber gas laser," *Opt. Lett.* 40, 605-608 (2015)
 - 14) F Benabid, F Gérôme, L Vincetti, B Debord, M Alharbi, T Bradley, "Inhibited coupling hollow-core photonic crystal fiber", *Proc. SPIE 8994, Photonic and Phononic Properties of Engineered Nanostructures IV*, 89940A (2 April 2014); doi:10.1117/12.2047913
 - 15) T. D. Bradley; Y. Y. Wang; M. Alharbi; C. Fourcade Dutin; B. J. Mangan; N. V.

Wheeler; F. Benabid, "Progress in hollow core photonic crystal fiber for atomic vapour based coherent optics", Proc. SPIE 8273, Advances in Slow and Fast Light V, 82730O (8 February 2012); doi: 10.1117/12.915281

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- 1) B. Debord ; **M. Alharbi** ; T. Bradley ; C. Fourcade-Dutin ; Y. Y. Wang ; L. Vincetti ; F. Gerome ; F. Benabid, "Cups curvature effect on confinement loss in hypocycloid-core Kagome HC-PCF," *CLEO: 2013*, San Jose, CA, 2013, pp. 1-2. doi: 10.1364/CLEO_SI.2013.CTu2K.4
- 2) **M. Alharbi**, B. Debord, M. Dontabactouny, F. Gérôme, and F. Benabid, "17.6 THz waveform synthesis by phase-locked Raman sidebands generation in HC-PCF," in *CLEO: 2014*, OSA Technical Digest (online) (Optical Society of America, 2014), paper SF2N.6.
- 3) **M. Alharbi** ; T. Bradley ; B. Debord ; C. Fourcade-Dutin ; D. Ghosh ; L. Vincetti ; F. Gerome ; F. Benabid, "Cladding effect on confinement and bend losses in hypocycloid-core Kagome HC-PCF," *CLEO: 2013*, San Jose, CA, 2013, pp. 1-2. doi: 10.1364/CLEO_SI.2013.CTu2K.7
- 4) Z. XIMENG, B. Debord, **M. Alharbi**, L. Vincetti, F. Gérôme, and F. Benabid, "Splicing Tapered Inhibited-coupling Hypocycloid-core Kagome Fiber to SMF Fibers," in *CLEO: 2015*, OSA Technical Digest (online) (Optical Society of America, 2015), paper STu1N.1.
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- 6) B. Debord, F. Gérôme, **M. Alharbi**, C. Hoenninger, E. Mottay, A. Husakou, and F. Benabid, "High energy pulse compression regimes in hypocycloid-core kagome hollow-core photonic crystal fibers," in *CLEO: 2014*, OSA Technical Digest (online) (Optical Society of America, 2014), paper SF2N.4.
- 7) B. Debord, M. Dontabactouny, **M. Alharbi**, C. Fourcade-Dutin, C. Hoenninger, E. Mottay, L. Vincetti, F. Gérôme, and F. Benabid, "Multi-meter fiber-delivery and compression of milli-Joule femtosecond laser and fiber-aided micromachining," in *Advanced Solid-State Lasers Congress*, G. Huber and P. Moulton, eds., OSA Technical Digest (online) (Optical Society of America, 2013), paper AT1A.6.
- 8) Y. Y. Wang ; Xiang Peng ; **M. Alharbi** ; C. Fourcade Dutin ; T. D. Bradley ; Michael Mielke ; Timothy Booth ; F. Benabid, "Low loss Kagome hollow-core photonic crystal fiber for high power fast laser beam transportation and pulse compression," *2012 Conference on Lasers and Electro-Optics (CLEO)*, San Jose, CA, 2012, pp. 1-2. doi: 10.1364/CLEO_AT.2012.JTh3I.6
- 9) F. Benabid, A. Husakou, **M. Alharbi**, F. Gerome, B. Debord, and M. Chafer, "Sub-recoil linewidth and high power CW stimulated Raman scattering in the Lamb-Dicke regime," in *Conference on Lasers and Electro-Optics*, OSA Technical Digest (2016) (Optical Society of America, 2016), paper JTh4A.2.
- 10) Aurélien Benoît ; Benoit Beaudou ; **Meeshal Alharbi** ; Benoît Debord ; Frédéric Gérôme ; François Salin ; Fetah Benabid, "High power wide Raman combs in picosecond-laser pumped H2-filled inhibited coupling kagome fibers," *2015 17th International Conference on Transparent Optical Networks (ICTON)*, Budapest, 2015, pp. 1-4. doi: 10.1109/ICTON.2015.7193325

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 - 16) E. Ilinova, T. Bradley, **M. Alharbi**, J. Mac Ferran, B. Debord, F. Gérôme, and F. Benabid, "Ultra-long lived atomic polarization of Rb confined in hypocycloidal Kagome HC-PCF," in *CLEO: 2014*, OSA Technical Digest (online) (Optical Society of America, 2014), paper FTh3B.5.
 - 17) Benoît Debord, Madhoussoudhana Dontabactouny, **Meshaal Alharbi**, Coralie Fourcade Dutin, Clemens Hönninger, Eric Mottay, E. Mocaer, Luca Vincetti, Frédéric Gérôme, Fetah A. Benabid, "Fiber-delivery and Compression of Milli-joule Femtosecond Pulses and Micromachining" Smart Laser Processing Conference, SLPC1-6, 2014.
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 - 20) **M. O. Alharbi**, A. Husakou, and F. Benabid, "Sub-natural Raman linewidth and high power CW Raman-Stokes laser in hydrogen filled HC-PCF," in *CLEO:2011 - Laser Applications to Photonic Applications*, OSA Technical Digest (CD) (Optical Society of America, 2011), paper QThS4.