

<b>Job title</b>	<b>PhD Student in Fibre Source Development</b>
<b>Ref</b>	<b>2018-17-NEXTLIGHT</b>
<b>Job type (PhD, Post-doc, Engineer)</b>	<b>PhD</b>
<b>Contract duration (months)</b>	36 months
<b>Qualifications (Master degree, PhD...)</b>	Masters Degree
<b>Job hours (full time/ part time)</b>	Full time
<b>Employer</b>	UBFC – Université de Franche-Comté
<b>Host Laboratory</b>	FEMTO-ST
<b>URL Host Laboratory</b>	<a href="http://www.femto-st.fr">www.femto-st.fr</a>
<b>Address Host Laboratory</b>	15 B Avenue des Montboucons, 25000 Besançon, France
<b>Job description</b>	<p>An important goal in current photonics research is to develop next-generation sources of coherent light at wavelengths where existing sources do not exist or are severely limited (e.g. in the mid-infrared or ultraviolet spectral regions.) This PhD project aims to contribute directly to solving this problem by developing new approaches to the generation of broadband light in optical fibres exploiting novel concepts from nonlinear dynamics to stabilize high power supercontinuum generation.</p> <p>This PhD thesis involves both experimental and theoretical/numerical modelling, and will include both the design of a range of novel fibre propagation scenarios (including fibre lasers) as well as their experimental implementation. The candidate will work within a dynamic research environment with many possibilities for working in an international collaborative environment.</p>
<b>Supervisor(s)</b>	John DUDLEY : john.dudley@univ-fcomte.fr
<b>Candidate profile</b>	Candidates should have a Masters-level background in physics or electrical engineering with an equivalent grading of first or upper second class honours. Previous courses and interest in nonlinear optics, fibre optics and laser physics is essential. The project involves both numerical and experimental aspects; knowledge and experience with MATLAB is indispensable, and previous laboratory experience with handling and manipulation of optical fibres, instrumentation and interfacing etc is highly beneficial.

<b>Keywords</b>	Nonlinear optics, laser development, supercontinuum generation
<b>Application deadline</b>	28 July 2018
<b>Starting Job</b>	October 1 <sup>st</sup> , 2018
<b>Application</b>	<p>Please send the following documents (all in one PDF file) by e-mail to <a href="mailto:job-application@ubfc.fr">job-application@ubfc.fr</a>:</p> <ol style="list-style-type: none"> <li>1) For EU candidates: Copy of your national ID card or of your passport page where your photo is printed. For non-EU candidates: Copy of your passport page where your photo is printed.</li> <li>2) Curriculum Vitae (1 page).</li> <li>3) Letter of motivation relatively to the position (1 page).</li> <li>4) Copy of your Master degree if already available.</li> <li>5) Copy of your final marks and ranks.</li> <li>6) Coordinates of reference persons (maximum 3, at least your master thesis supervisor): Title, Name, organization, e-mail.</li> </ol> <p>If you have questions regarding the application, please contact the supervisor.</p>