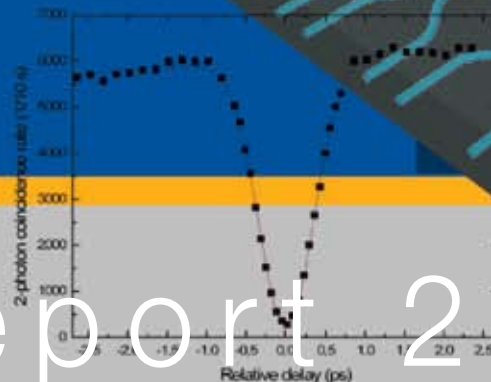
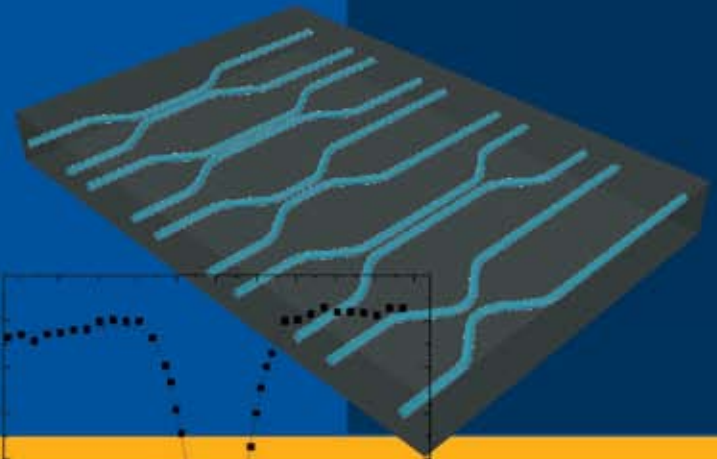
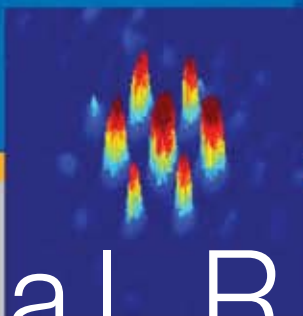
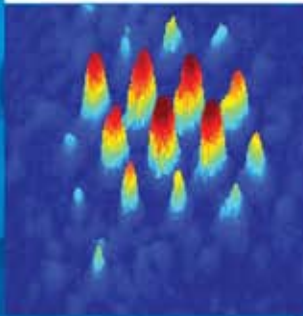
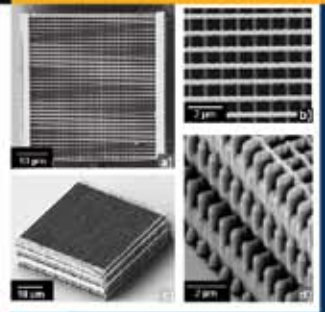
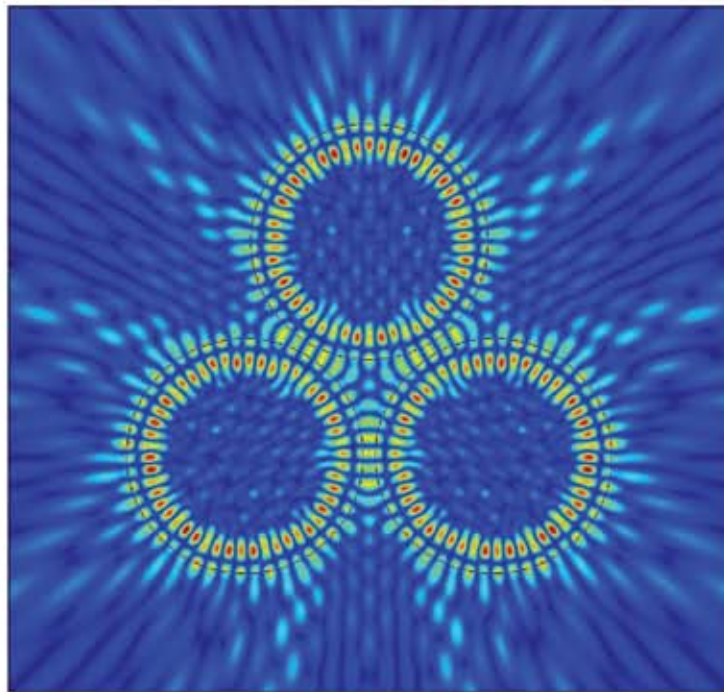
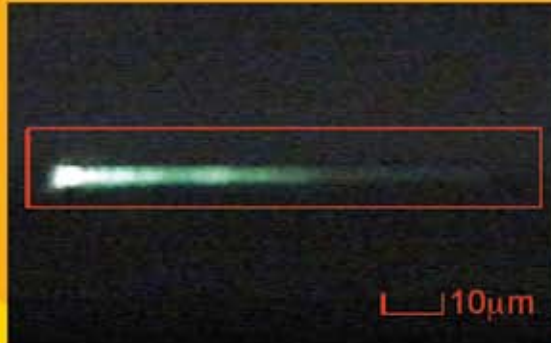


CUDOS

The Centre for Ultrahigh bandwidth Devices for Optical Systems (CUDOS)



Annual Report 2008

List of Students

Name	University	Type	Supervisor	Title	Completion date (approx. month/year)
Continuing postgrads (including completing in 2009)					
Michael Lamont	UoS	PhD	Moss, Eggleton, de Sterke	Integrated all-optical devices in chalcogenide waveguides	2009
Michael Lee	UoS	PhD	Grillet/Eggleton	Optical cavities through photosensitivity in chalcogenide photonic crystals	~2010
Bill Corcoran	UoS	PhD	Eggleton, Monat	Non-linear Signal Processes in Silicon Waveguides	~2010
Neil Baker	UoS	PhD	Eggleton, de Sterke	Slow light in chalcogenide grating structures	2009
Sam Campbell	UoS	PhD	McPhedran, Botten, de Sterke	Radiation losses in photonic crystals	early 2009
Cameron Smith	UoS	PhD	Eggleton, Grillet	Coupling into photonic crystal waveguides and cavities using tapered nanowires	Jun-09
Doug Little	Macq	PhD	Withford, Marshall	Near-field optical microscopy	mid 2009
Luke Stewart	Macq	PhD	Withford, Marshall, Dawes	Self-assembly of photonic crystal structures	mid 2009
Nem Jovanovich	Macq	PhD	Withford, Fuerbach	Functionalising fibre lasers by exploiting point by point fibre Bragg gratings	mid 2009
Sara Ek	Macq	MPhil	Dawes, Withford	Waveguides in self assembled photonic crystals	2009
Dionne Haynes	Macq	MPhil	Withford, Dawes, Bland-Hawthorn (AAO)	End face effects of Optical fibres in astronomy	early 2009
Ivan Garanovich	ANU	PhD	Sukhorukov, Kivshar, Neshev	All-optical switching in nonlinear modulated lattices	09 or 10
Sangwoo Ha	ANU	PhD	Sukhorukov	Slow light in periodic photonic structures	2010
Alex Minovich	ANU	PhD	Neshev	Interaction of singular optical beams with resonant nonlinear media	2009
Daniel Buccoliero	ANU	PhD	Desyatnykov	Nonlocal Solitons	2009
Amrita Prasad	ANU	PhD	Luther-Davies	Ge-As-Se glasses for all optical processing	2009
Darren Freeman	ANU	PhD	Luther-Davies	Chalcogenide photonic crystals produced using a focused ion beam mill	2009
Arthur Davoyan	ANU	PhD	Shadrivov, Sukhorukov, Kivshar	Nonlinear plasmonics and metamaterials	~2010
Steven Morrison	ANU	PhD	Kivshar	Electromagnetic waves and scattering in photonic crystals	2009
Aaron Matthews	ANU	PhD	Kivshar	Photonic Crystals and Optical devices	submitted 11/11/2008, waiting for reports
Michael Byrne	UTS	PhD	Botten	Modal formulations for photonic crystal devices	2009
Sivan Vijay	RMIT	PhD	A/Prof Arnan Mitchell	Surface Modification of LiNbO3	Mar-09
Mahmud Tanveer	RMIT	PhD	A/Prof Arnan Mitchell	Doped Polymer Waveguides for Optofluidic Sensors	Mar-10
Jiafang Li	Swinb	PhD	Gu/Zhou/Jia	Radiation dynamics of three-dimensional photonic crystals fabricated by two-photon polymerization	Feb-09
Elisa Nicoletti	Swinb	PhD	Gu/Zhou/Jia	Development of new non linear materials for photonic crystal applications	~2010
Postgrads having completed in 2008					
Hong Nguyen	UoS	PhD	Eggleton, de Sterke, Kuhlmeiy	Tapered photonic crystal fibres: fundamental and applications	Oct-08
Martin Ams	Macq	PhD	Withford, Dawes, Marshall	Laser-written waveguide and amplifiers	Apr-08
Ben Johnston	Macq	PhD	Withford, Dekker	Periodically poled devices	Nov-08
Christian Rosberg	ANU	PhD	Neshev, Kivshar, Krolikowski	Bragg scattering in nonlinear photonic lattices	Mar-08
Robert Fisher	ANU	PhD	Neshev	Nonlinear Wave transport in periodic structures	submitted 19/01/2008, has been accepted
Michael James Ventura	Swinb	PhD	Gu	Fabrication and characterisation of three-dimensional photonic crystals	
New postgrads having started in 2008					
Darran Wu	UoS	MSc	Kuhlmeiy/Eggleton	Hyrid photonic crystal fibres	mid 2009
Sahand Mahmoodian	UoS	PhD	de Sterke, McPhedran, Botten, Poulton, Dossou	Defect Modes in Photonic Crystals	
Felix Lawrence	UoS	PhD	de Sterke, Botten, McPhedran	Photonic Crystals and Impedance	2011
Stephen Dekker	UoS	PhD	Eggleton, de Sterke	Nonlinear optical processes in tapered chalcogenide nanowires	2011
Parry Chen	UoS	PhD	McPhedran, Botten, Asatryan, Steel	Photonic crystals with positive and negative refractive index inclusions	
Trung Vo	UoS	PhD	Eggleton/Pelusi	Nonlinear signal processing in Chalcogenide waveguides	2011
Irina Kabakova	UoS	PhD	de Sterke, Eggleton	Nonlinear pulse propagation effects in complex Bragg gratings	2011

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Christopher Miese	Macq	PhD	Fuerbach, Withford	Generation and application of high-energy femtosecond laser pulses with MHz repetition rates	~2011
Robert Williams	Macq	Mphil	Withford, Marshall	Tunable fibre laser sources	~2010
Francis Bennet	ANU	PhD	Neshev, Krolikowski	Tunable microphotronics based on infiltrated photonic crystal fibres.	2010
Xin Gai	ANU	PhD	Barry Luther-Davies, Steve Madden, Duk Choi	Nanophotonic nonlinear devices produced by e-beam lithography	2011-2012
Ting Han	ANU	PhD	Steve Madden, Barry Luther-Davies	High Performance waveguides produced by nanoimprinting and hot embossing	2010
Dougal Kan	UTS	PhD	Botten/Poulton	Semi-analytic modeling of Photonic Crystal Woodpiles	2011
Tim Lunn	RMIT	PhD	Dr Lam Bui and A/Prof Arnan Mitchell	Investigation of non-linear polarisation phenomena in Lithium Niobate Waveguides	Mar-11
Vikrant Kundra	RMIT	PhD	A/Prof Arnan Mitchell and Dr Lam Bui	Time Sampled Analogue Photonic Signal Processing	Sep-10
Kushan Dayaratne	RMIT	PhD	Dr Lam Bui and A/Prof Arnan Mitchell	Inexpensive High Performance Optoelectronic Oscillator for Microwave Signal Processing Applications	Mar-11
Ben Cumming	Swinb	PhD	Gu/Zhou	Aberration compensation in high refractive index materials	~2012
Montasir Hossain	Swinb	PhD	Gu	Fabrication and Characterisation of Three Dimensional Metallic Photonic Crystals	
Honours students 2008					
Tim Iredale	UoS		Eggleton/Pelusi		
Alessandro Tuniz	UoS		Eggleton/Moss	Raman modulation schemes in photonic structures	
Hugo Dupree	UoS		de Sterke	Slow light superimposed Bragg gratings	
Tom Grujic	UoS		Kuhlmeiy/de Sterke	Running rings around photonic crystal fibres	
Nick Cvetojevic	Macq		Dawes, Withford, Parker, Haynes	Tunable fibre Bragg gratings and applications in temporal spectral astronomy	
Trevor Manning	UTS		Poulton		
Kiplimo Yego	RMIT		A/Prof Arnan Mitchell	Hardware Accelerated FDTD simulations of optical waveguide gratings	
Stephen Weber	Swinb		Gu/Zhou	Fabrication of Two-dimensional Photonic Crystals and Theoretical Characterisation of Superprism Effect	
Visiting students in 2008					
	Host Institution	Home Institution	Level	Period	Supervisor
Jelle Storteboom	UoS	Twente	masters	3 months	Kuhlmeiy/ Eggleton/ Bolger/Luan
Uwe Bog	UoS	Karlsruhe	masters	6 months	Karntnusch
Majid Ebnali	UoS	Iran	PhD	6months-1year	Monat
Bruno Soria	UoS	Strasbourg, France	undergrad	3 months	Grillet
Benoit Gobaut	UoS	Grenoble	undergrad	3 months	Kuhlmeiy
Qing Shi	UoS	Nankai University	PhD	1 year	Kuhlmeiy/ Eggleton
Clement Lafargue	UoS	ENS Cachan, France	undergrad	4 months	Eggleton/ Bolger
Falk Eilenberger	UoS	Jena	PhD	1 year	Eggleton/ deSterke
Rebecca Berman	UoS	Rochester	undergrad	3 months	Magi/ Eggleton
Rasmussen Per	ANU	COM/DTU	PhD	April-June 2008	Neshev
Xinyuan Qi	ANU	Nankai Uni/ China	PhD	Sept.2008 - Sept. 2009	Neshev
Marsal Nicolas	ANU	SUPELEC, France	PhD	Jun-08	Neshev
Dumay David	ANU	Polytech' Clermont-Ferrand	PhD	31/5-31/8/08	Neshev
Wenjie Wang	ANU	Nankai University	PhD	19/9/08 – 19/9/10	Krolikowski
Qiming Zhang	Swinburne	Fudan University, China	PhD	6 months	Gu/Zhou