

Abbreviations

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ABBREVIATIONS

BC. Base curvature Break-even point **BFP BPM** Black Pro Mist

BSS Balanced slat solution CCCompensation comparison CCDCharge-coupled device

CDVA Corrected distance visual acuity

CL Confidence interval

CIE Commission Internationale de l'Eclairage

CS Contrast sensitivity CT Center thickens CWContent of water DA Total diameter

DC. Direct compensation

Deg. Degree

D/N Distance/Near

ESD Expected standard deviation

FU Follow-up

GS Grading system IOL Intraocular lens

lens

logMAR Logarithm of the minimum angle of resolution

Logarithm of the straylight parameter log(s)

Mo Month

Refractive index

Nd:YAG Neodymium-doped Yttrium Aluminum Garnet

Significance level р

PCO Posterior capsule opacification

PMMA Polymethylmethacrylate **PSF** Point spread function

 R^2 Coefficient of determination

RGB Rigid gas permeable RI Refractive index

RIF Refractive lens exchange

RMSD Repeated-measures standard deviation

Straylight parameter SD Standard deviation



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sr	Steradian
VA	Visual acuity
У	Year
θ	Scatter angle
λ	wavelenght

PHD PORTFOLIO

PhD student: Grzegorz łabuz Promotor: Prof. dr. Jan C. van Meurs

Institution: Rotterdam Ophthalmic Institute (ROI) Co-promotors: Dr. Thomas J.T.P. van den Berg,

PhD period: Apr 2014 - Apr 2017 Dr. Nicolaas J. Reus

1. PhD training

		Year	Workload (Hours/ECT)
Ge	eneral courses		
-	Fourier analysis for vision science. University of Murcia, L. Thibos (Indiana University School of Optometry, USA)	2014-2015	5 ECTS
-	Advanced clinical contactology. University of Murcia, D. López- Alcón	2014	4 ECTS
-	Aging of the visual system. University of Murcia, N. López-Gil	2014	4 ECTS
-	Ocular pathology of the anterior and posterior segment of the eye. University of Murcia, E. Usón-González	2015	
-	Advances in refractive and cataract surgery. University of Murcia, R. Pérez-Cambrodí	2015	4 ECTS
-	Applied statistics for optometrists. University of Murcia, J. Sánchez-Meca	2015	4 ECTS
-	Biomedical English Writing and Communication, Erasmus MC	2016	3 ECTS
-	Scientific Integrity, Erasmus MC	2016	0.3 ECTS
Sp	ecific courses (e.g. Research school, Medical Training)		
-	Introduction to Zemax. Dr. Ian Wallhead (Anncar Optics, Spain)	2015	32 hours
-	Straylight seminar. Rich N. Pfisterer (Laser 2000 GmbH, Germany)	2016	24 hours
Se	minars and workshops		
-	Weekly scientific seminars, University of Murcia	2014-2015	2 hours
-	Weekly scientific seminars, ROI	2014-2017	1 hour
(In	ter)national conferences		
-	VPO, Wroclaw, Poland	2014	
-	XXXII ESCRS, London, UK	2014	
-	OC'15 Ageing Eye, Valencia, Spain (oral presentation)	2015	30 hours
-	ARVO, Denver, USA (poster presentation)	2015	40 hours
-	II International meeting of Lexum Academy, Krakow, Poland (oral presentation)	2015	30 hours
-	XXXIII ESCRS, Barcelona, Spain (oral/poster presentation)	2015	70 hours
-	OC'16 Ageing Eye, Murcia, Spain (oral presentation)	2016	30 hours
-	ARVO, Seattle, USA (oral presentation, 2 nd author of the presented poster)	2016	90 hours
-	WAEH, Rotterdam, the Netherlands (poster)	2016	10 hours
-	VPO, Antwerp, Belgium (oral presentation)	2016	40 hours
-	XXXIV ESCRS. Copenhagen, Denmark (2 oral presentations)	2016	90 hours
-	Scientific seminar, University of Murcia (3 oral presentations)	2014-2015	12 hours
-	Scientific seminar, ROI (3 oral presentations)	2014-2017	12 hours



LIST OF PUBLICATIONS

- 1. Łabuz G, Reus NJ, van den Berg TJTP. Ocular straylight in the normal pseudophakic eye. J Cataract Refract Surg. 2015 Jul;41(7):1406-15.
- 2. Lapid-Gortzak R, Łabuz G van der Meulen I, van der Linden JW, Mourits MP, van den Berg TJTP. Straylight Measurements in Two Different Apodized Diffractive Multifocal Intraocular Lenses. J Refract Surg. 2015 Nov;31(11):746-51.
- 3. Łabuz G, Vargas-Martin F, van den Berg TJTP, López-Gil N. Method for in vitro assessment of straylight from intraocular lenses. Biomed Opt Express. 2015 Oct 19;6(11):4457-64.
- 4. Łabuz G, Reus NJ, van den Berg TJTP. Comparison of ocular straylight after implantation of various multifocal intraocular lenses. J Cataract Refract Surg. 2016 Apr;42(4):618-25.
- 5. Łabuz G, López-Gil N, van den Berg TJTP, Vargas-Martin F. Ocular straylight with different multifocal contact lenses. Submitted for publication. Optom Vis Sci, 94.4 (2017): 496-504
- 6. Łabuz G, Reus NJ, van den Berg TJTP. Straylight from glistenings in intraocular lenses: an in vitro study. J Cataract Refract Surg. 2017; 43:102-108.
- 7. Łabuz G, Papadatou E, Vargas-Martín F, López-Gil N, Reus NJ, van den Berg TJTP, Validation of a spectral light scattering method to differentiate large from small particles in intraocular lenses, Biomed. Opt. Express 8, 1889-1894.
- 8. Łabuz G, Reus NJ, van den Berg TJTP. Light scattering levels from intraocular lenses extracted from donor eyes. J Cataract Refract Surg. (in press).



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ABOUT THE AUTHOR

Grzegorz was born on November 20, 1985 in Zlotoryja (Poland). After completing a study of Optical Engineering at the Faculty of Fundamental Problems of Technology (Wroclaw University of Technology) in 2010, he received a master's degree in Optometry at the same faculty in 2012. In 2010 he also started a 4-year professional career as a clinical optometrist, first at the SPEKTRUM eye clinic, and later at the LEXUM (Optegra) eye clinics. To pursue a scientific career, he moved to the Netherlands in 2014 to join the international Ageye project (Marie Curie Initial Training Network) to conduct research on "Intraocular scattering through different optical designs" at the Rotterdam Ophthalmic Institute, and to obtain a PhD degree. During his PhD study he did a secondment at the University of Murcia, which was also part of the Ageye network, where he received hands-on training in optics, and obtained a master's degree in Advanced Optometry and Vision Science. After completing his 3-year PhD project in 2017, he started a new position at the David J Apple International Laboratory for Ocular Pathology at the University of Heidelberg to continue the intraocular lens research

