

# CONTENTS

<b>1</b>	<b>INTRODUCTION</b>	<b>5</b>
<b>1.1</b>	<b>STATE OF-THE-ART</b>	<b>6</b>
<b>1.2</b>	<b>OBJECTIVES OF THE DISSERTATION</b>	<b>8</b>
<b>2</b>	<b>SELECTED METHODS OF INVESTIGATION</b>	<b>9</b>
<b>2.1</b>	<b>MODELING OF PHOTON TRANSPORT IN TISSUE</b>	<b>9</b>
<b>2.1.1</b>	<i>Radiative transfer equation</i>	<b>9</b>
<b>3</b>	<b>EXPERIMENTAL RESULTS</b>	<b>13</b>
<b>3.1</b>	<b>STOKES VECTOR POLARIMETER</b>	<b>14</b>
<b>3.2</b>	<b>MONTE CARLO ANALYSIS OF MULTISCATTERED LIGHT</b>	<b>14</b>
<b>3.2.1</b>	<i>Intensity and degree of polarization</i>	<b>15</b>
<b>3.2</b>	<b>AGEING PROCESS</b>	<b>17</b>
<b>4</b>	<b>CONCLUSION</b>	<b>21</b>
<b>5</b>	<b>REFERENCES</b>	<b>23</b>
<b>6</b>	<b>OWN PUBLICATIONS</b>	<b>25</b>
<b>7</b>	<b>CURRICULUM VITAE</b>	<b>26</b>
<b>8</b>	<b>ABSTRACT</b>	<b>27</b>