

## **4,4-Difluoro-3-(3-phenyl-5-oxazolyl)-8-trifluoromethyl-5-(2-naphthyl)-4-bora-3a,4a-diaza-s-indacene**

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<sup>1</sup>H NMR spectrum of compound **1**

<sup>13</sup>C NMR spectrum of compound **1**

<sup>19</sup>F NMR spectrum of compound **1**

<sup>11</sup>B NMR spectrum of compound **1**

2D <sup>1</sup>H-<sup>15</sup>N HMBC spectrum of compound **1**

2D COSY spectrum of compound **1**

2D NOESY spectrum of compound **1**

2D <sup>1</sup>H-<sup>13</sup>C HMBC spectrum of compound **1**

2D <sup>1</sup>H-<sup>13</sup>C HSQC spectrum of compound **1**

IR spectrum of compound **1**

Normalized absorption and fluorescence spectra of compound **1**

<sup>1</sup>H NMR spectrum of compound **4**

<sup>13</sup>C NMR spectrum of compound **4**

<sup>19</sup>F NMR spectrum of compound **4**

IR spectrum of compound **4**

<sup>1</sup>H NMR spectrum of compound **2**

<sup>13</sup>C NMR spectrum of compound **2**

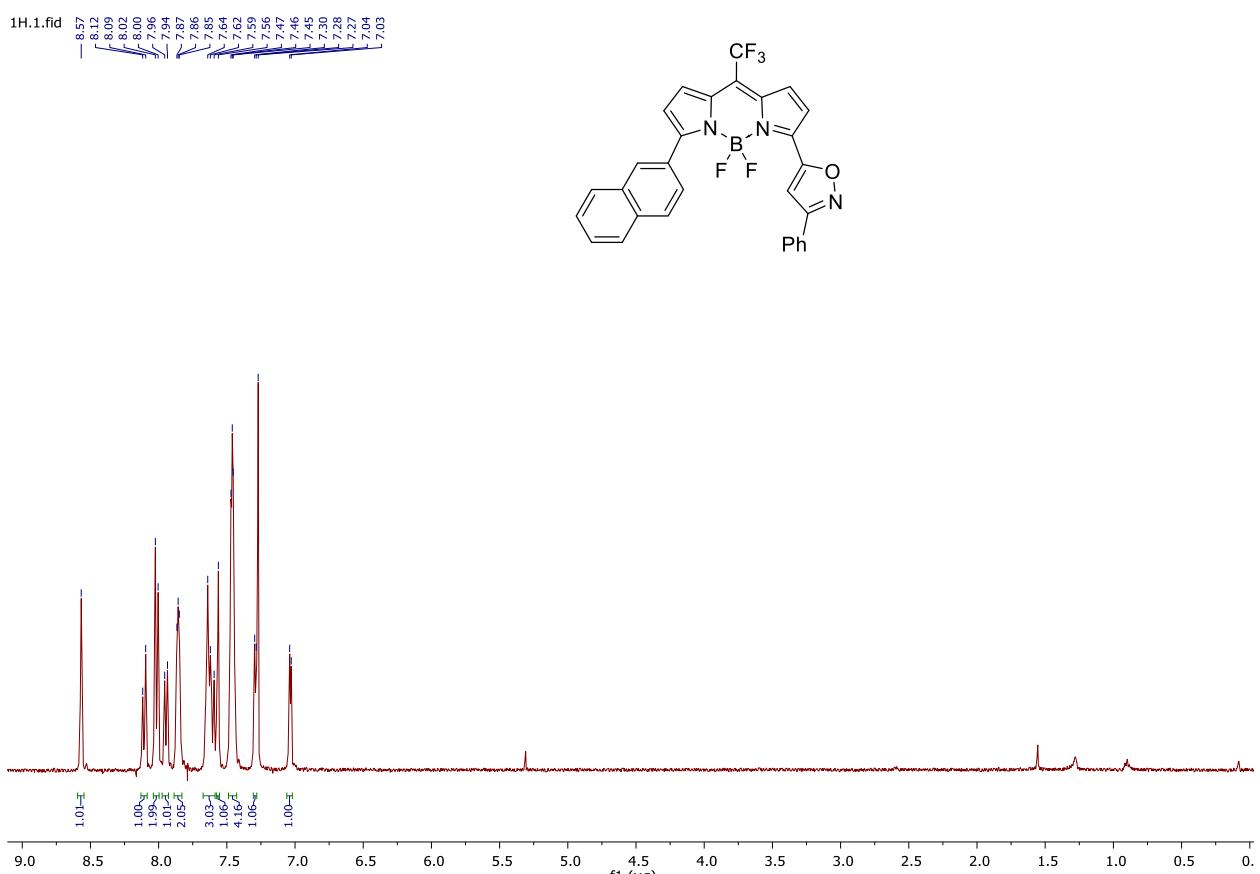
<sup>19</sup>F NMR spectrum of compound **2**

2D <sup>1</sup>H-<sup>15</sup>N HMBC spectrum of compound **2**

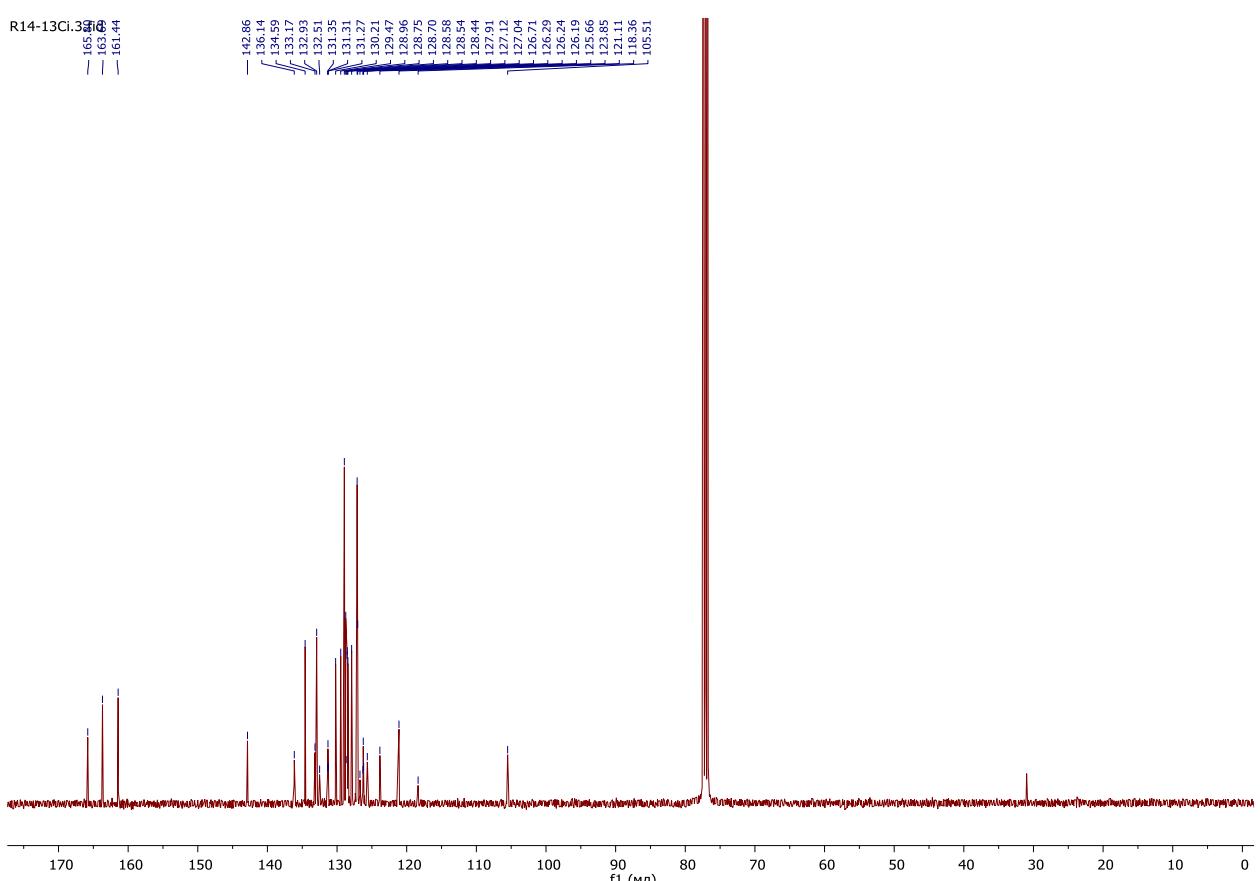
2D COSY spectrum of compound **2**

2D NOESY spectrum of compound **2**

IR spectrum of compound **2**

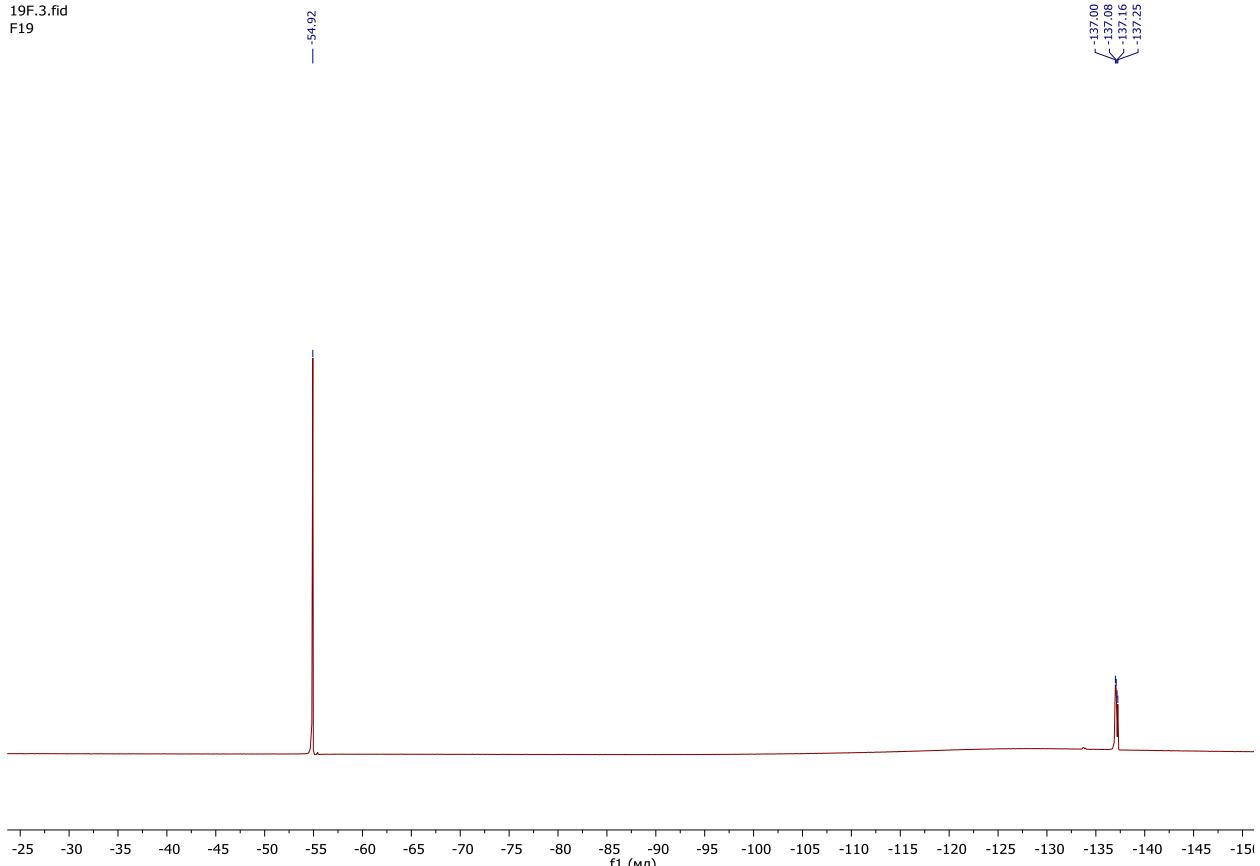


**Figure S1.**  $^1\text{H}$  NMR spectrum of 4,4-difluoro-3-(3-phenylisoxazol-5-yl)-8-trifluoromethyl-5-(naphthalene-2-yl)-4-bora-3a,4a-diaza-s-indacene (**1**) in  $\text{CDCl}_3$ .



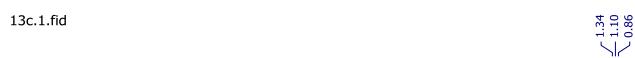
**Figure S2.**  $^{13}\text{C}$  NMR spectrum of 4,4-difluoro-3-(3-phenylisoxazol-5-yl)-8-trifluoromethyl-5-(naphthalen-2-yl)-4-bora-3a,4a-diaza-*s*-indacene (**1**) in  $\text{CDCl}_3$ .

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F19

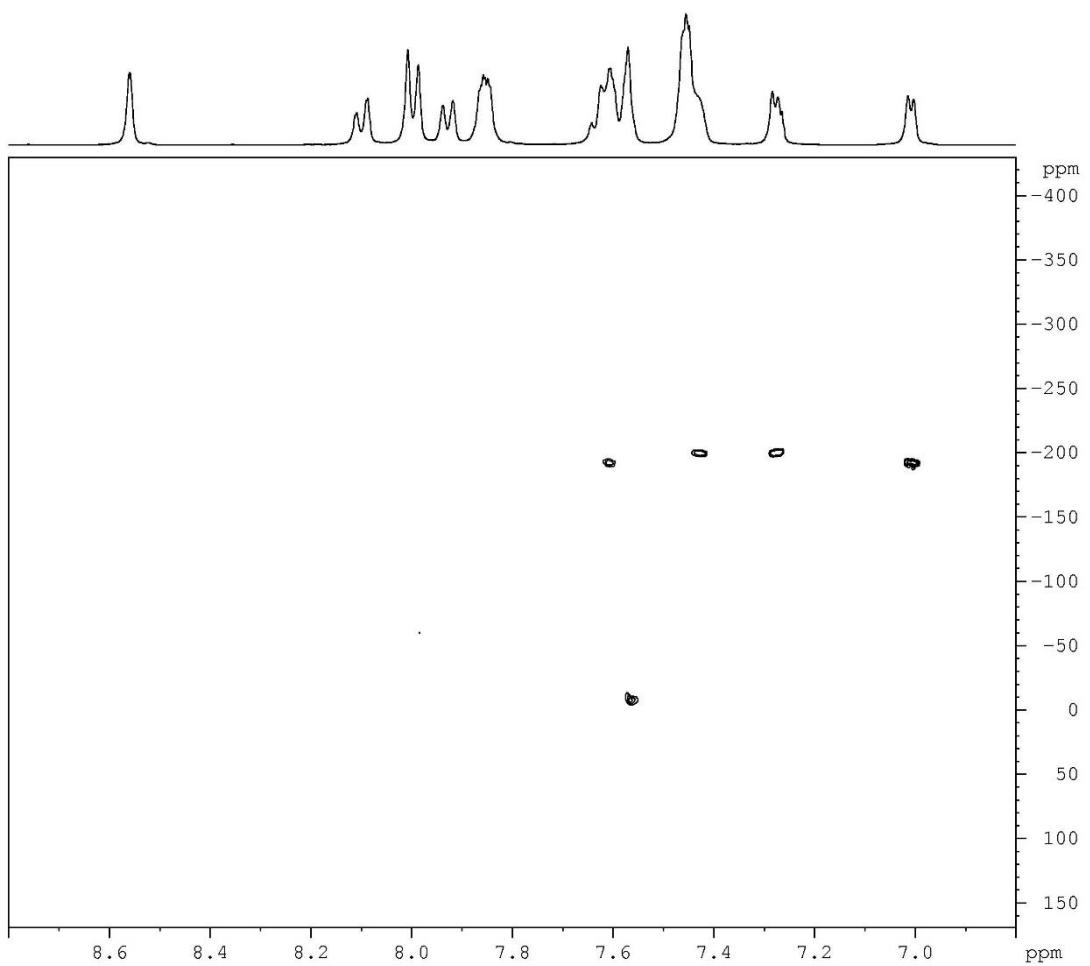


**Figure S3.** <sup>19</sup>F NMR spectrum of 4,4-difluoro-3-(3-phenylisoxazol-5-yl)-8-trifluoromethyl-5-(naphthalen-2-yl)-4-bora-3a,4a-diaza-s-indacene (**1**) in CDCl<sub>3</sub>.

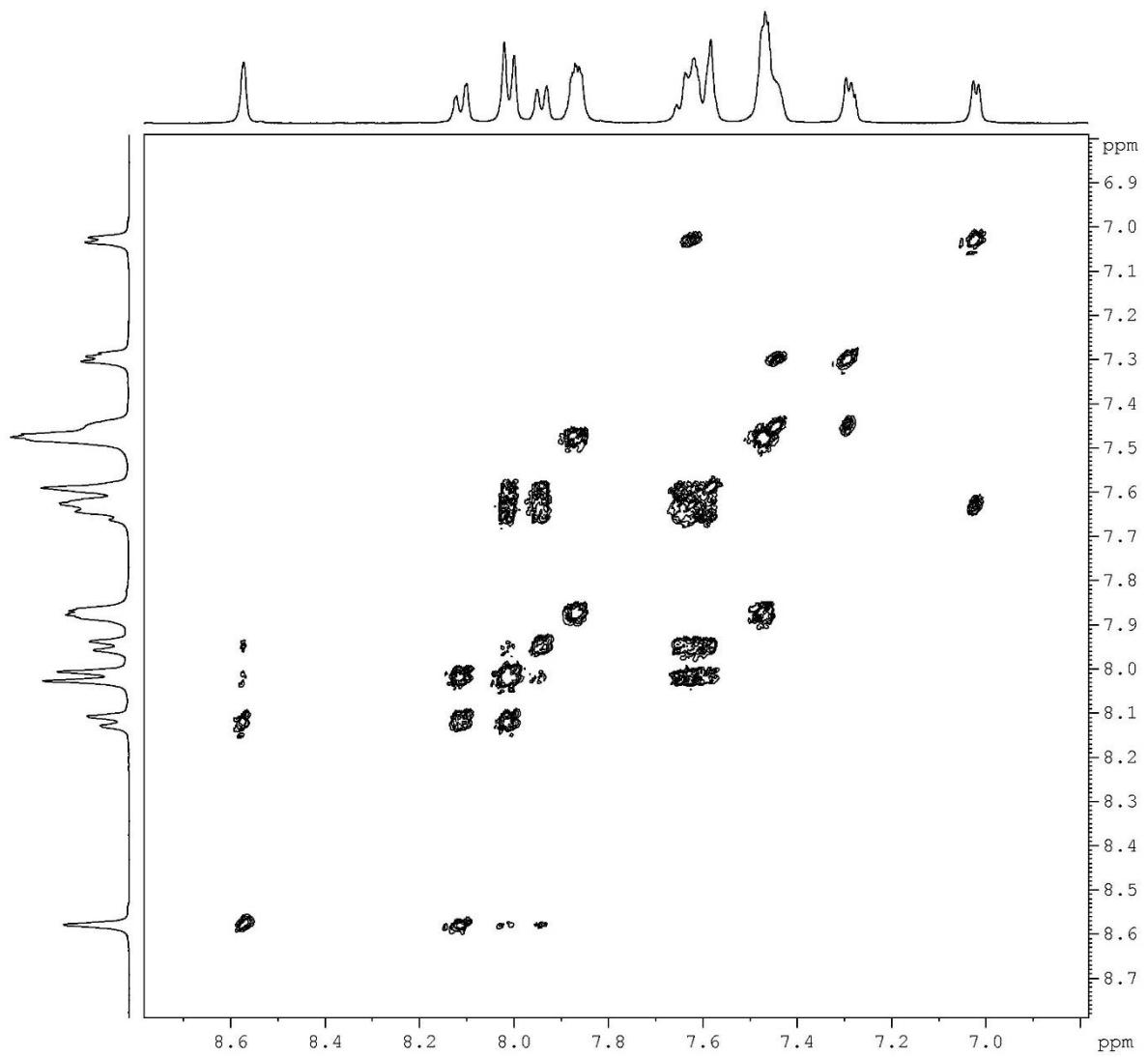
13c.1.fid



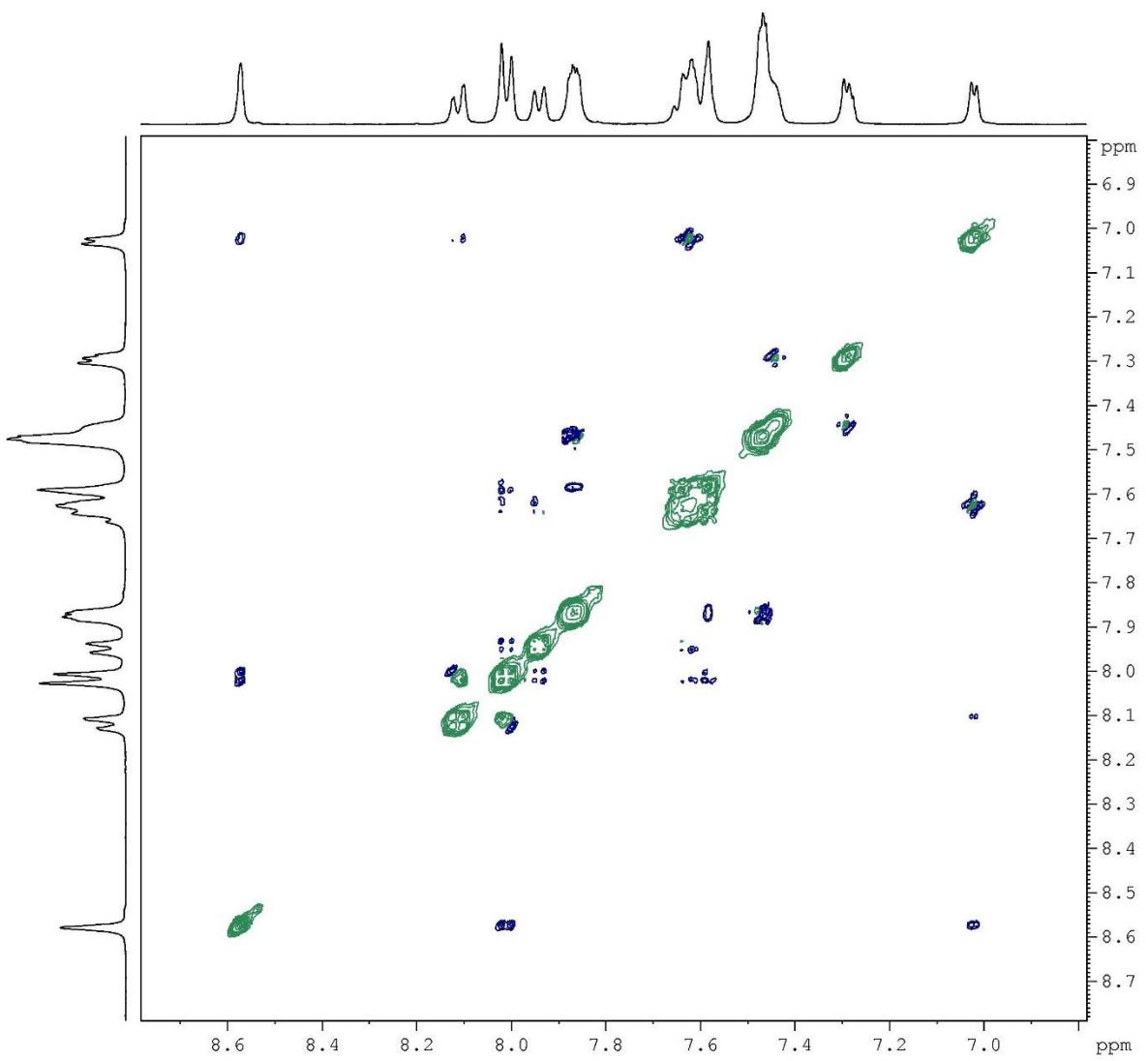
**Figure S4.** <sup>11</sup>B NMR spectrum of 4,4-difluoro-3-(3-phenylisoxazol-5-yl)-8-trifluoromethyl-5-(naphthalen-2-yl)-4-bora-3a,4a-diaza-s-indacene (**1**) in CDCl<sub>3</sub>.



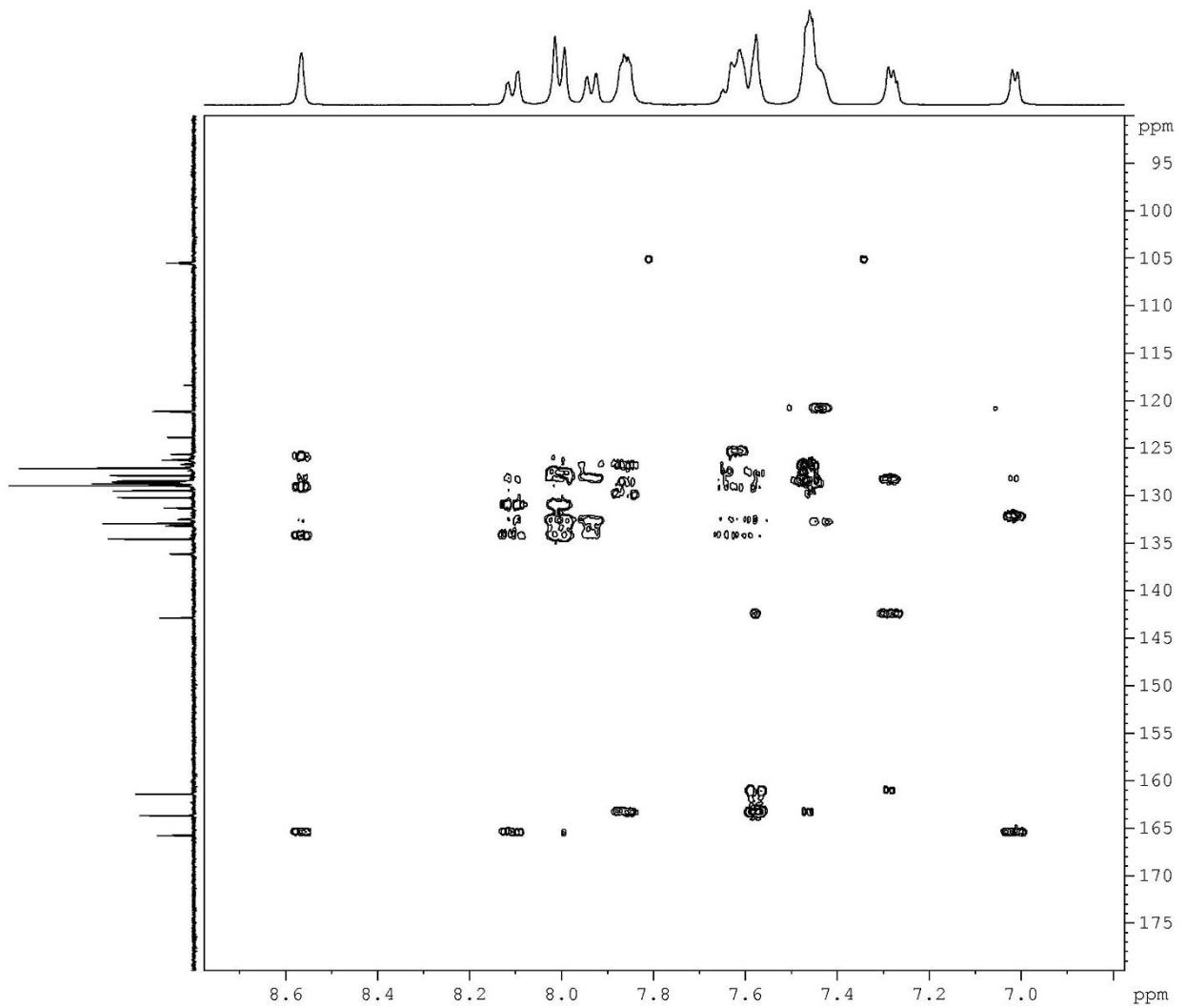
**Figure S5.** 2D  $^1\text{H}$ - $^{15}\text{N}$  HMBC spectrum of 4,4-difluoro-3-(3-phenylisoxazol-5-yl)-8-trifluoromethyl-5-(naphthalen-2-yl)-4-bora-3a,4a-diaza-s-indacene (**1**) ( $\text{CDCl}_3$ )



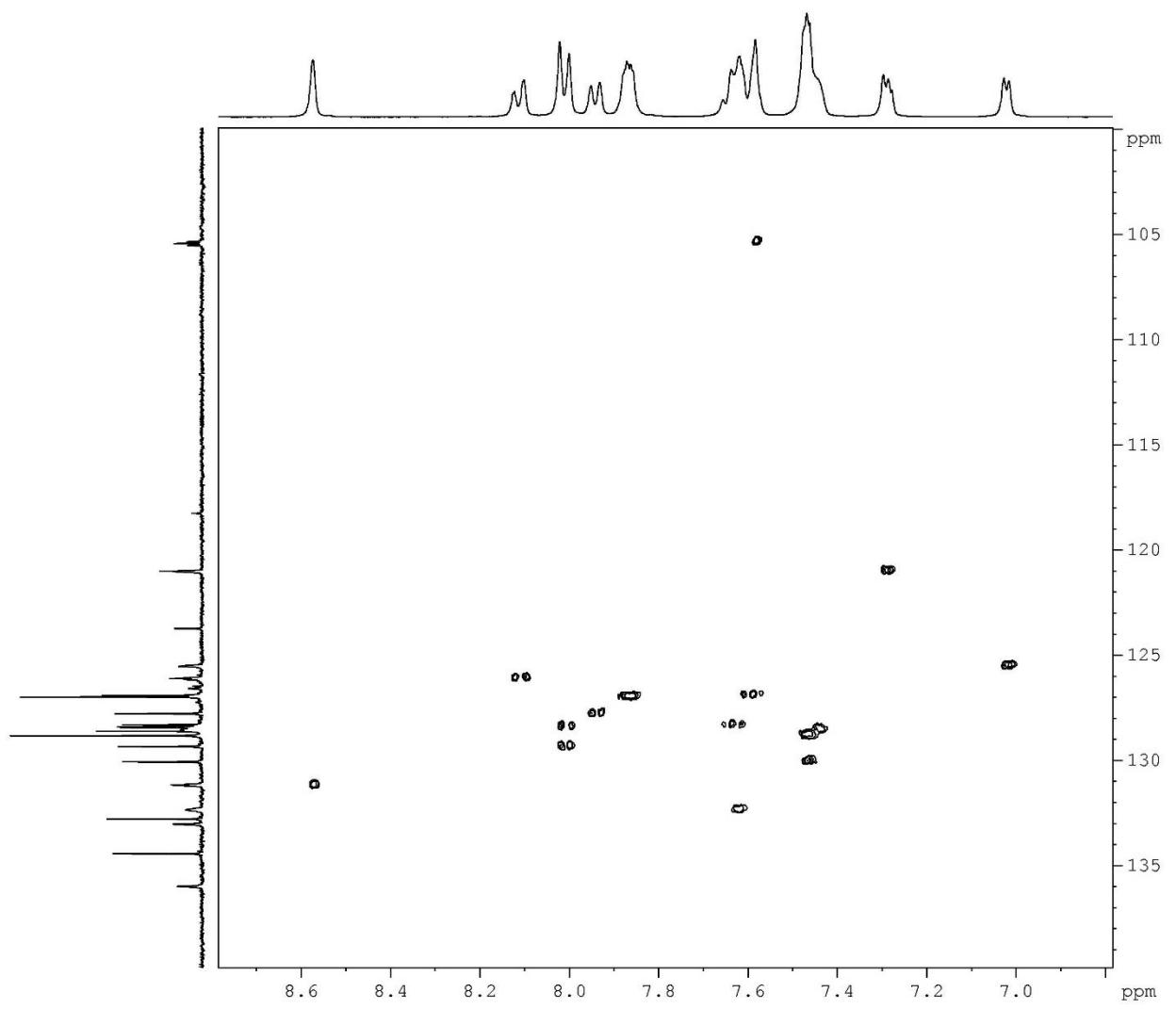
**Figure S6.** 2D COSY spectrum of 4,4-difluoro-3-(3-phenylisoxazol-5-yl)-8-trifluoromethyl-5-(naphthalen-2-yl)-4-bora-3a,4a-diaza-s-indacene (**1**) ( $\text{CDCl}_3$ )



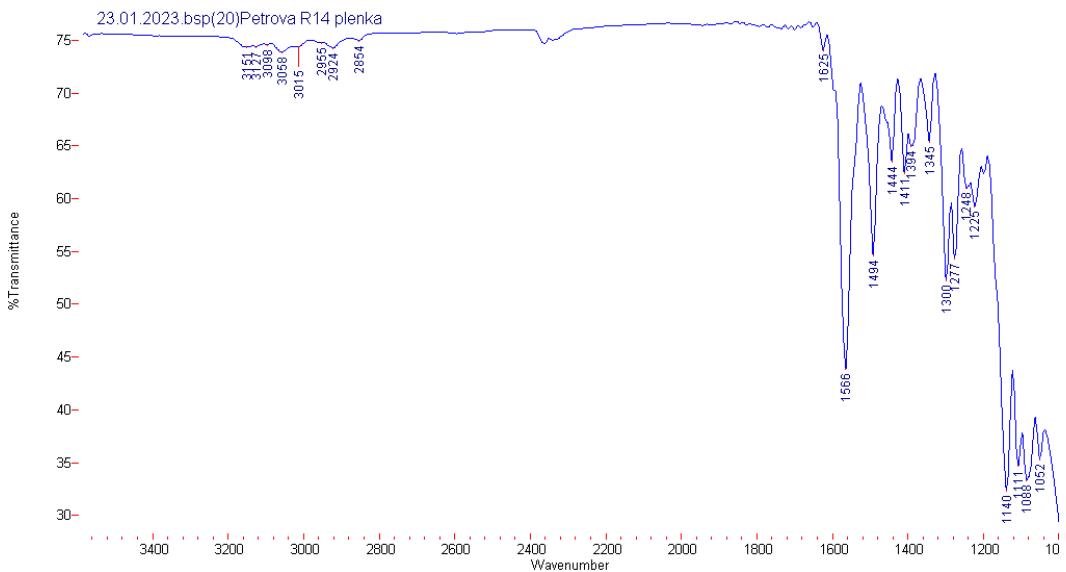
**Figure S7.** 2D NOESY spectrum of 4,4-difluoro-3-(3-phenylisoxazol-5-yl)-8-trifluoromethyl-5-(naphthalen-2-yl)-4-bora-3a,4a-diaza-s-indacene (**1**) ( $\text{CDCl}_3$ )



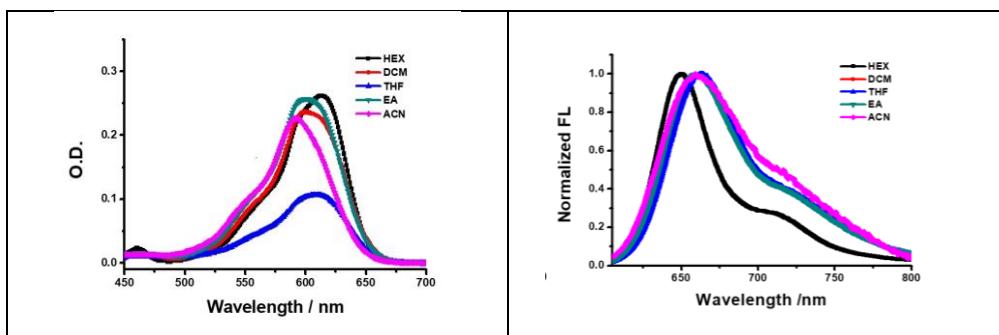
**Figure S8.** 2D  $^1\text{H}$ - $^{13}\text{C}$  HMBC spectrum of 4,4-difluoro-3-(3-phenylisoxazol-5-yl)-8-trifluoromethyl-5-(naphthalen-2-yl)-4-bora-3a,4a-diaza-s-indacene (**1**) ( $\text{CDCl}_3$ )



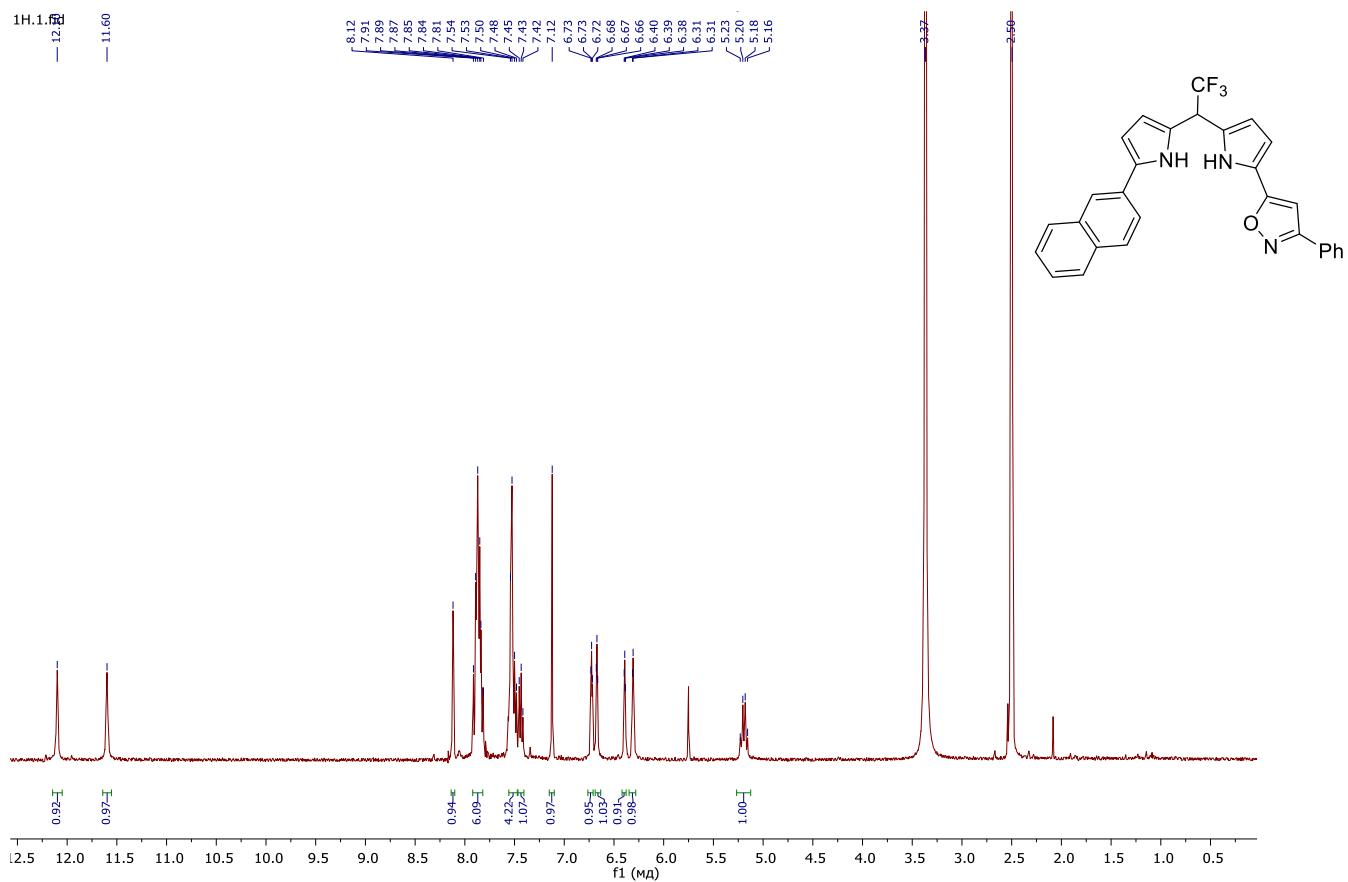
**Figure S9.** 2D  $^1\text{H}$ - $^{13}\text{C}$  HSQC spectrum of 4,4-difluoro-3-(3-phenylisoxazol-5-yl)-8-trifluoromethyl-5-(naphthalen-2-yl)-4-bora-3a,4a-diaza-s-indacene (**1**) ( $\text{CDCl}_3$ )



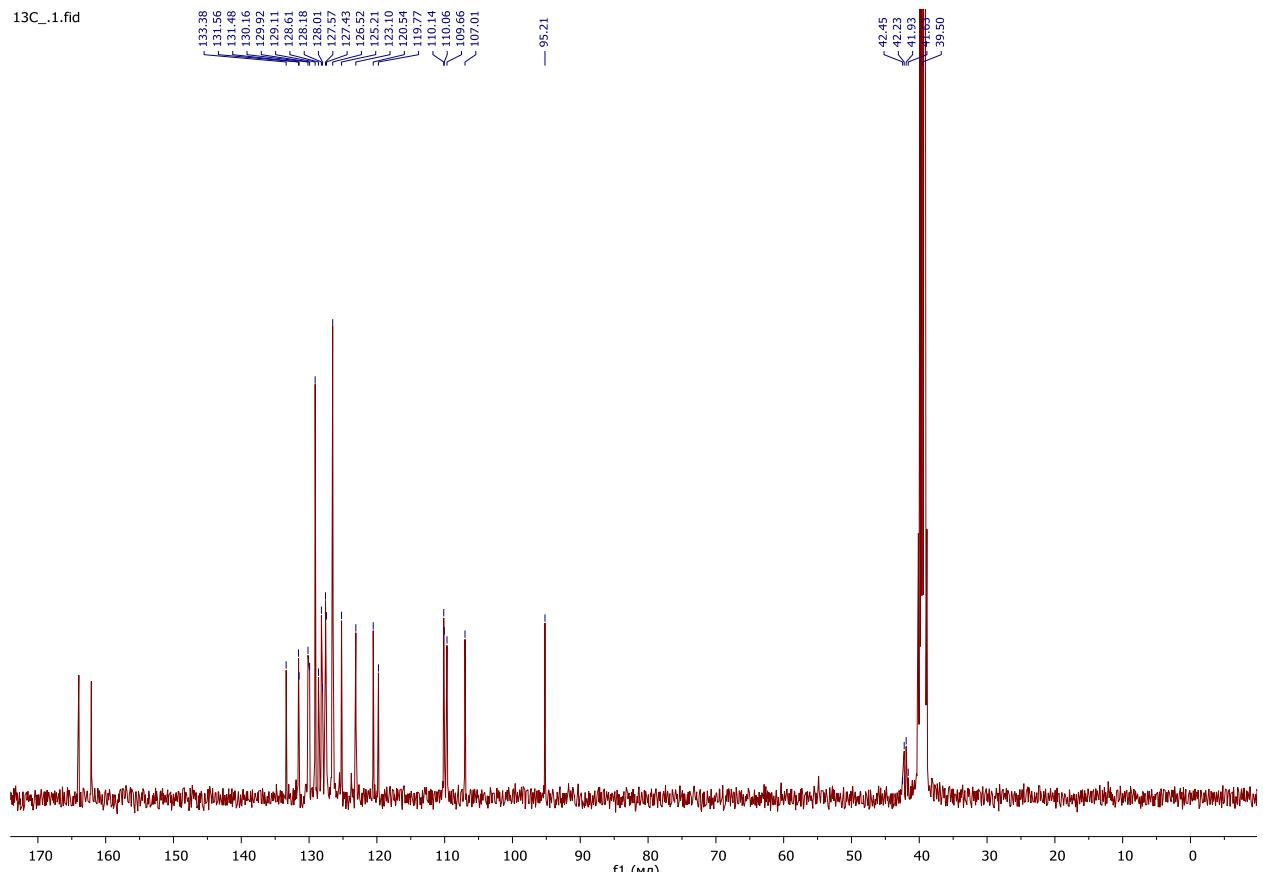
**Figure S10.** IR spectrum of 4,4-difluoro-3-(3-phenylisoxazol-5-yl)-8-trifluoromethyl-5-(naphthalen-2-yl)-4-bora-3a,4a-diaza-s-indacene (**1**) (film).



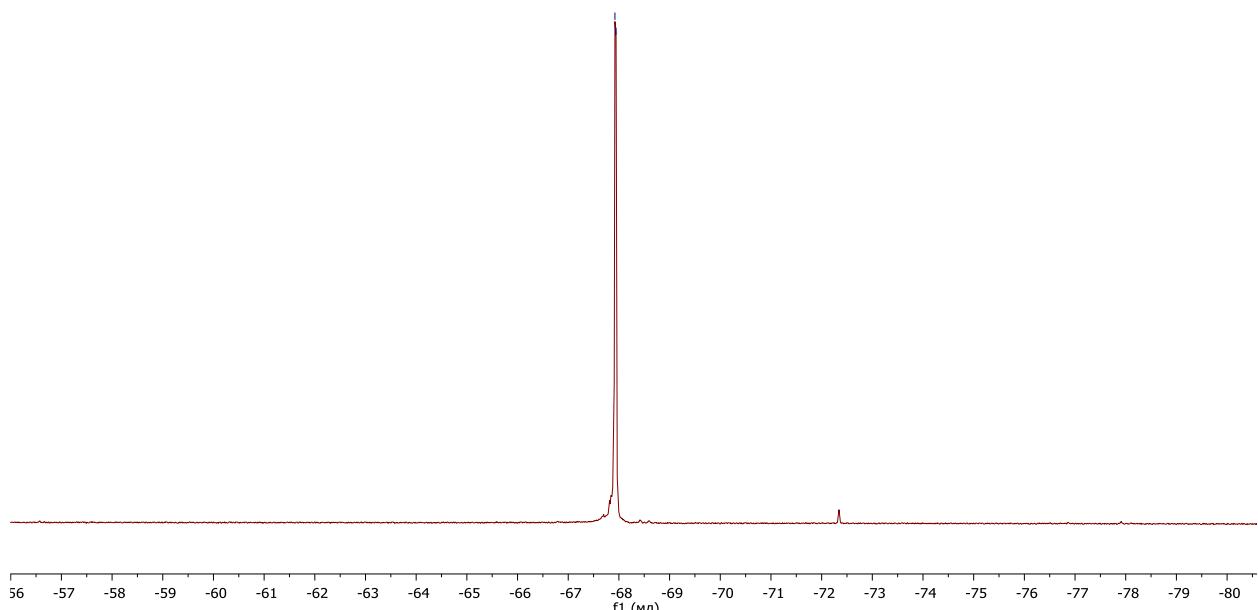
**Figure S11.** Normalized absorption and fluorescence spectra of compound **1** in different solvents (concentration  $5 \times 10^{-6}$  M)



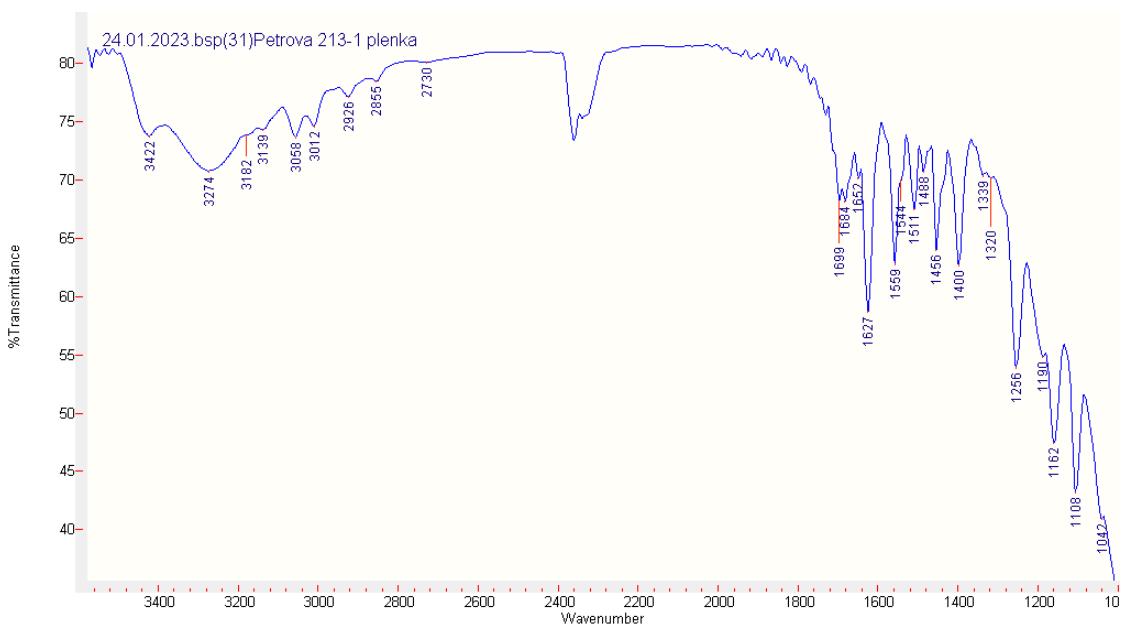
**Figure S12.**  $^1\text{H}$  NMR spectrum of 3-phenyl-5-(5-{2,2,2-trifluoro-1-[5-(naphthalen-2-yl)-1*H*-pyrrol-2-yl]-ethyl}-1*H*-pyrrol-2-yl)isoxazole (**4**) in  $\text{DMSO-d}_6$ .



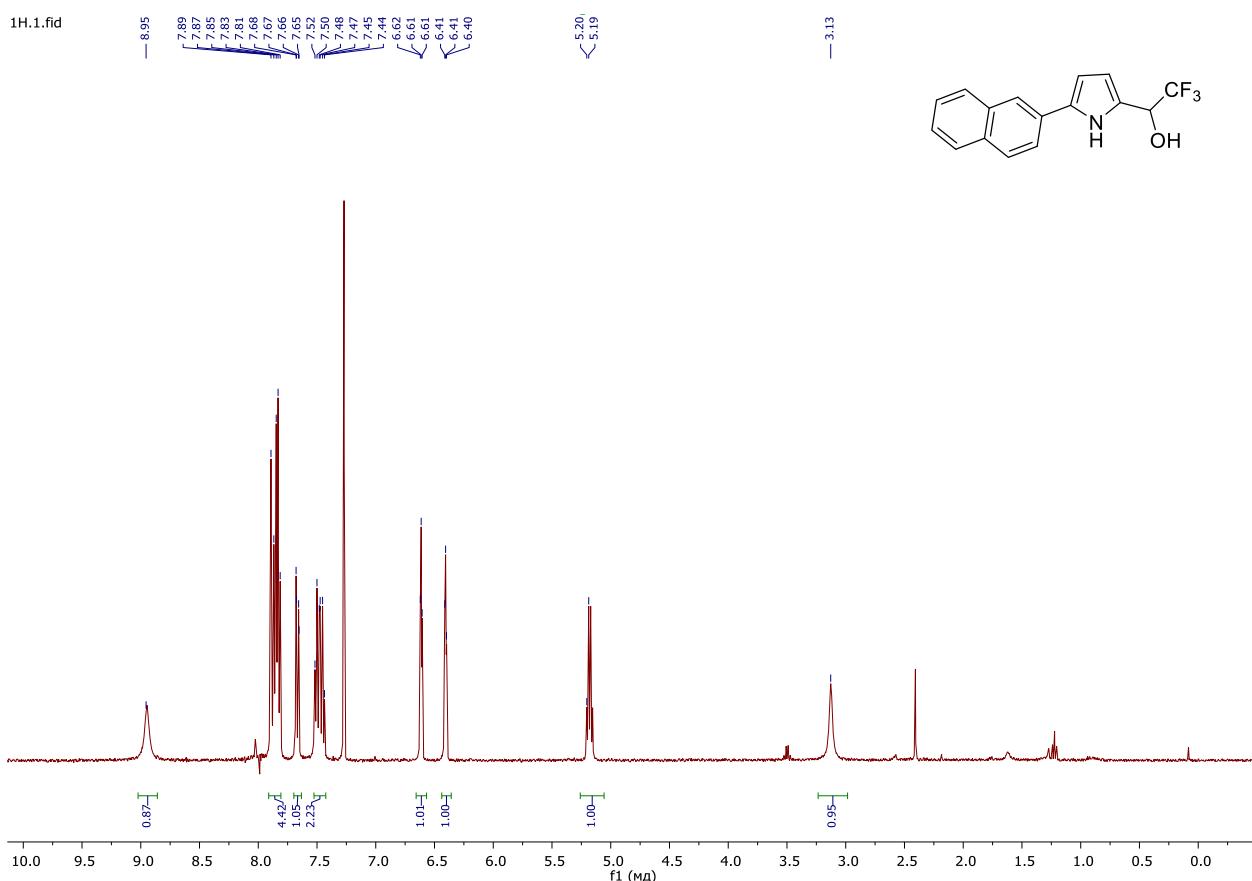
**Figure S13.**  $^{13}\text{C}$  NMR spectrum of 3-phenyl-5-(5-{2,2,2-trifluoro-1-[5-(naphthalen-2-yl)-1*H*-pyrrol-2-yl]-ethyl}-1*H*-pyrrol-2-yl)isoxazole (**4**) in  $\text{DMSO-d}_6$ .



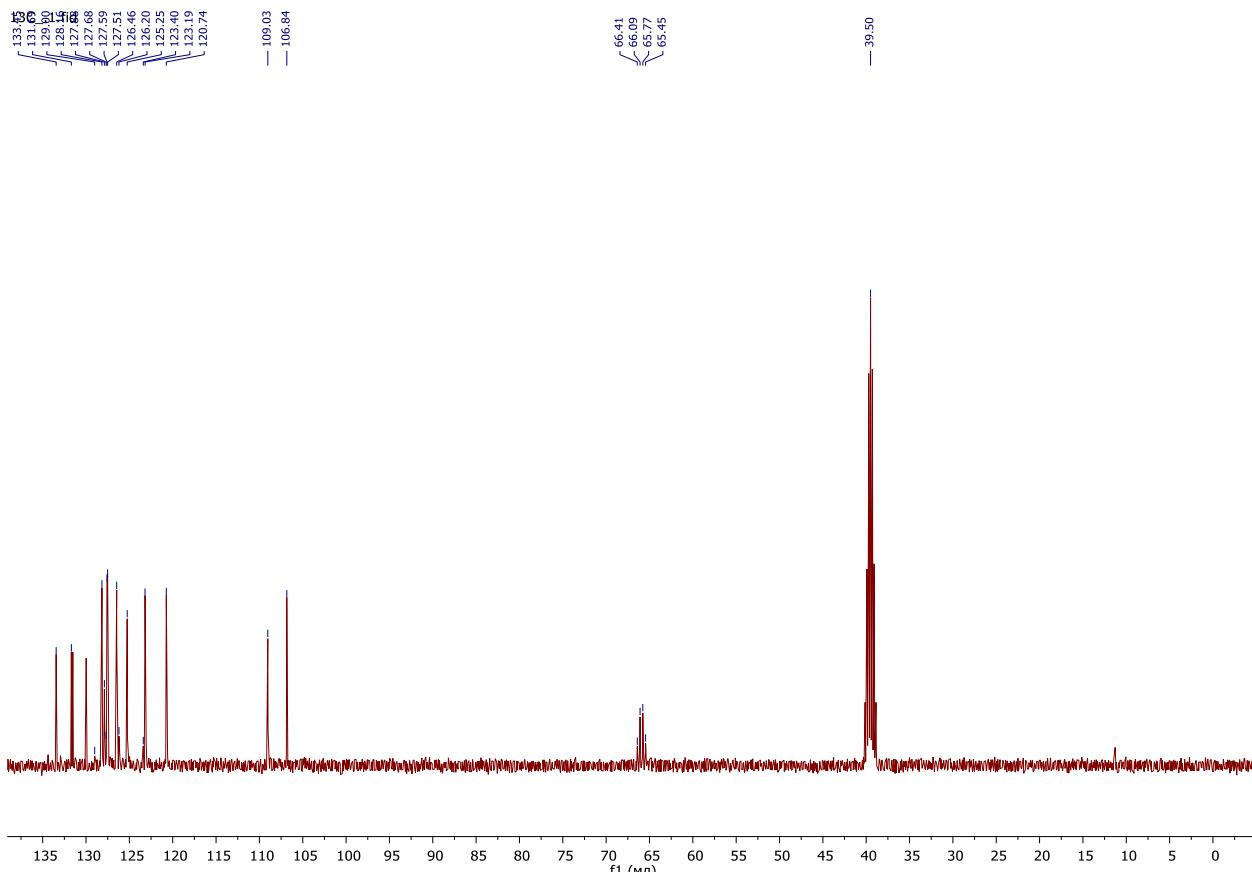
**Figure S14.** <sup>19</sup>F NMR spectrum of 3-phenyl-5-(5-{2,2,2-trifluoro-1-[5-(naphthalen-2-yl)-1H-pyrrol-2-yl]-ethyl}-1H-pyrrol-2-yl)isoxazole (**4**) in CDCl<sub>3</sub>.



**Figure S15.** IR spectrum of 3-phenyl-5-(5-{2,2,2-trifluoro-1-[5-(naphthalen-2-yl)-1H-pyrrol-2-yl]-ethyl}-1H-pyrrol-2-yl)isoxazole (**4**) (film).

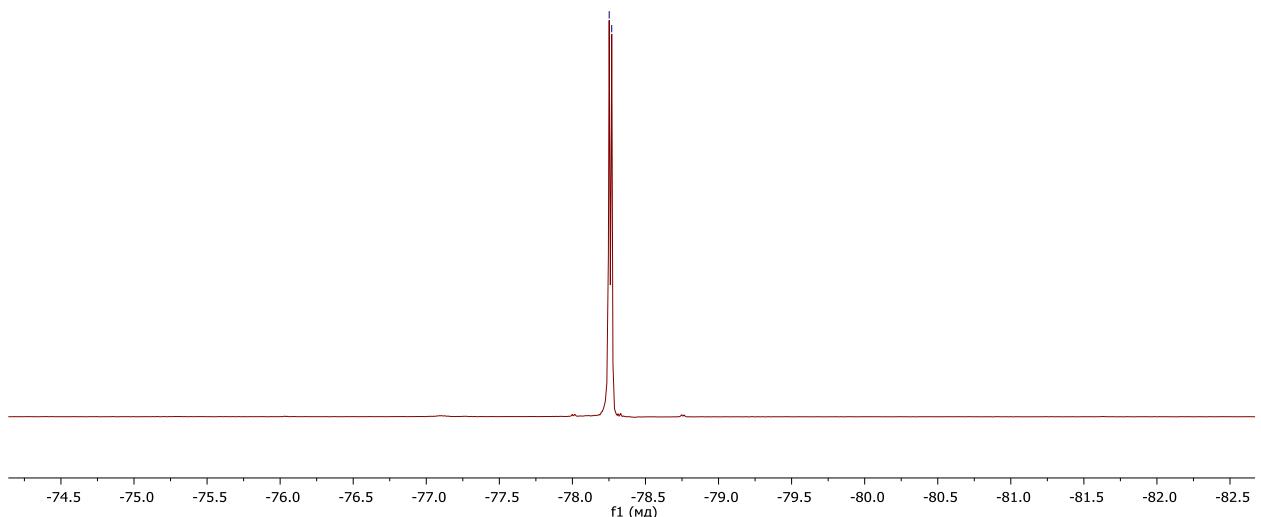


**Figure S16.**  $^1\text{H}$  NMR spectrum of 2,2,2-trifluoro-1-[5-(naphthalen-2-yl)pyrrol-2-yl]ethan-1-ol (**2**) in  $\text{CDCl}_3$ .

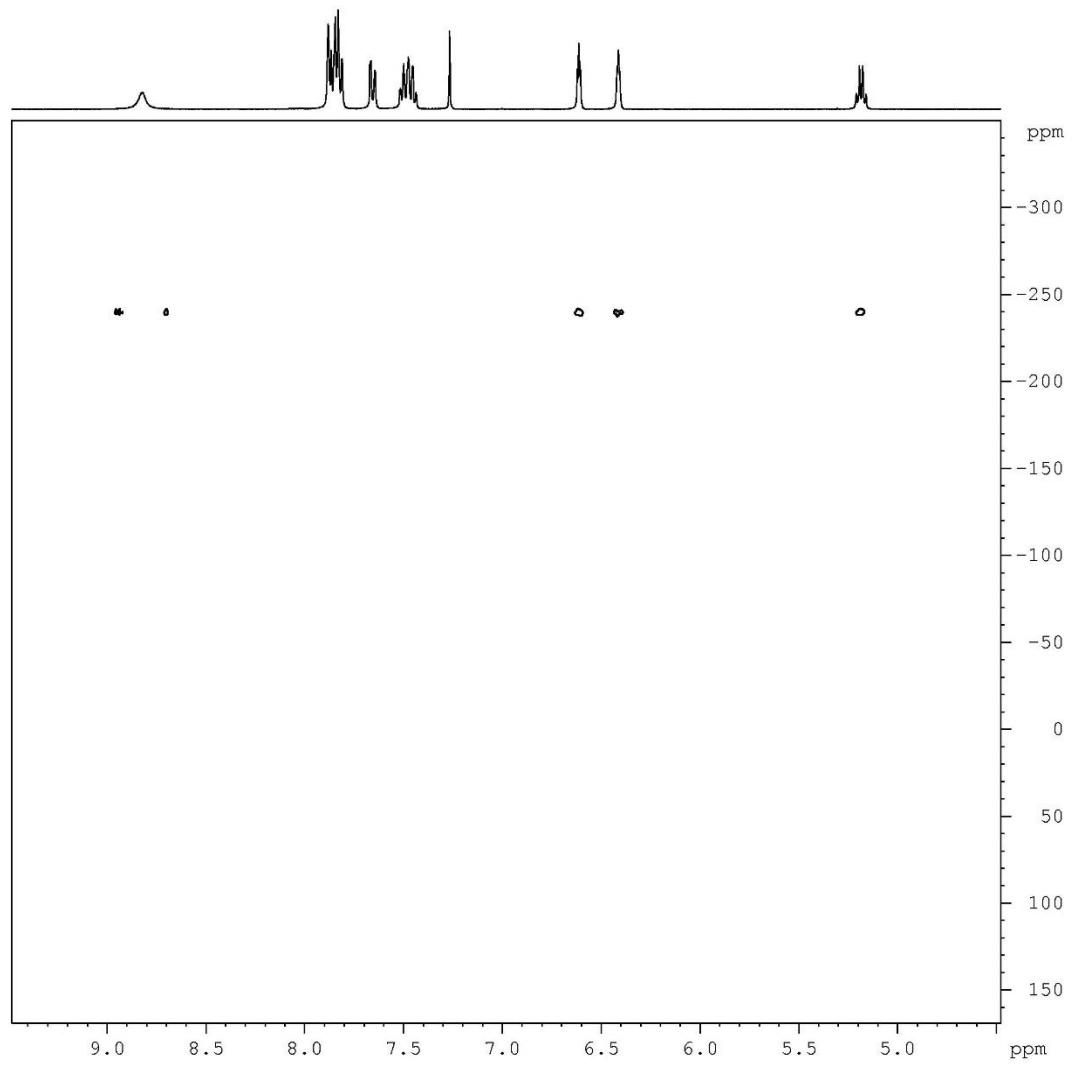


**Figure S17.**  $^{13}\text{C}$  NMR spectrum of 2,2,2-trifluoro-1-[5-(naphthalen-2-yl)pyrrol-2-yl]ethan-1-ol (**2**) in  $\text{DMSO-d}_6$ .

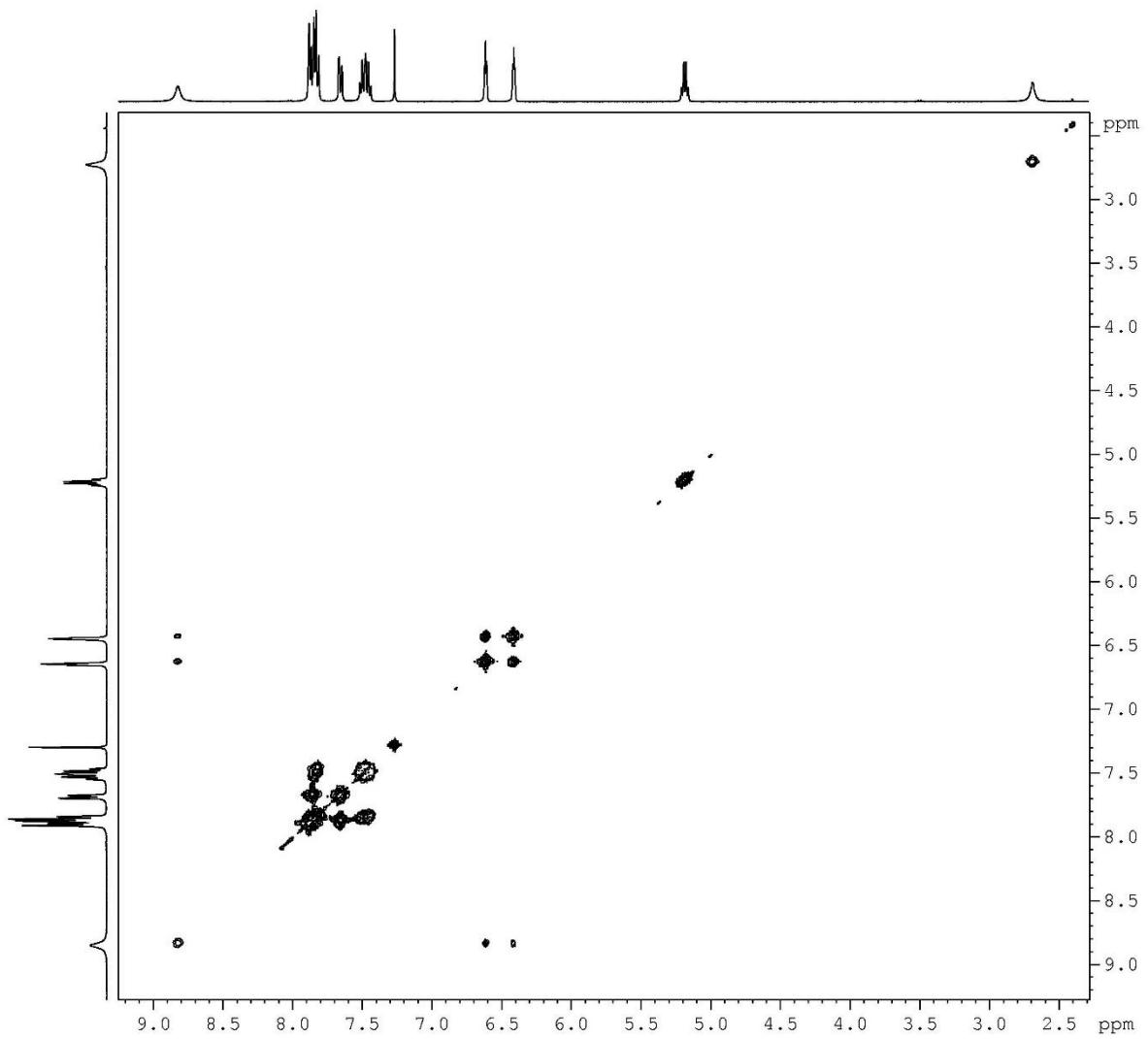
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-78.25  
-78.27



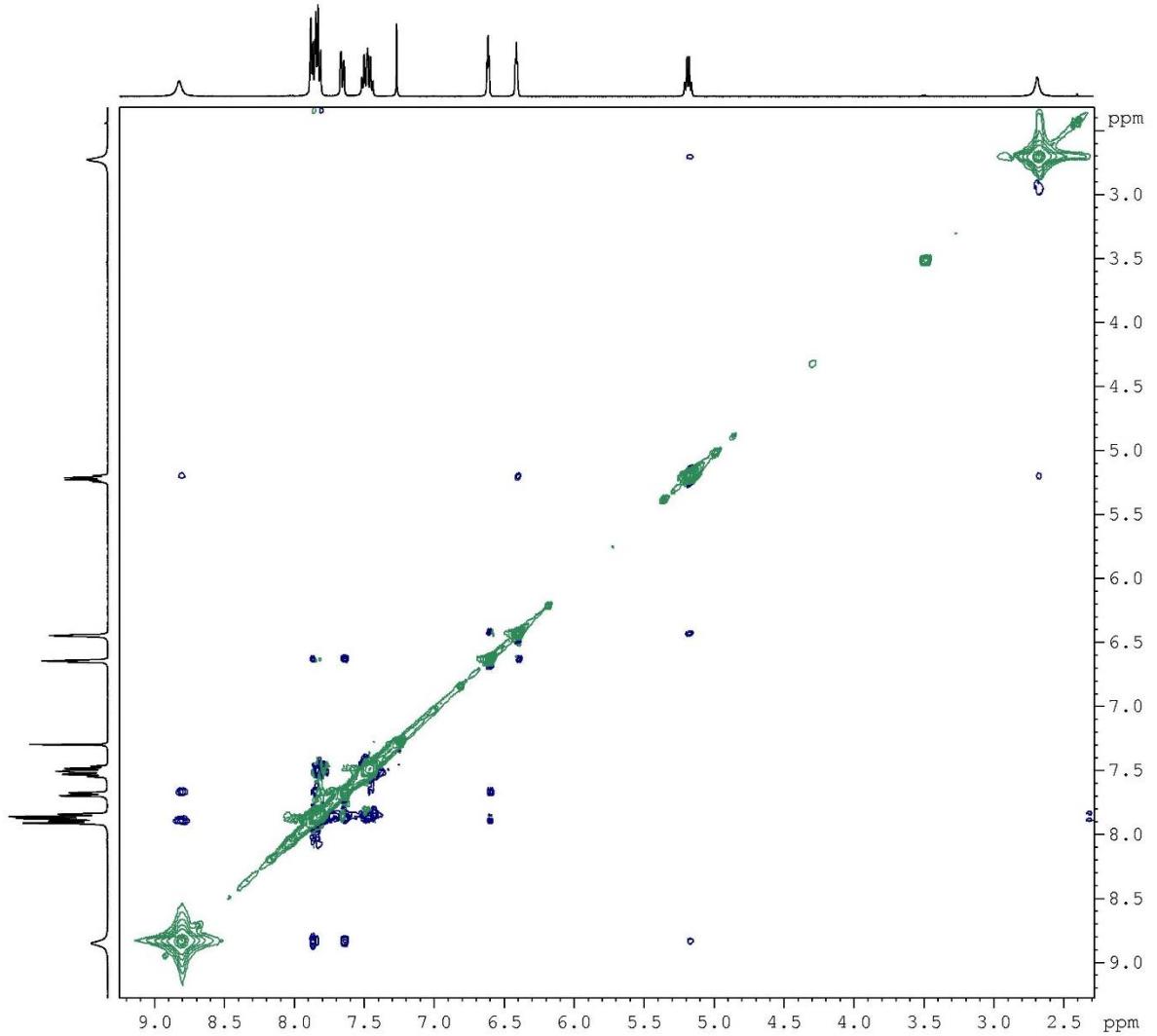
**Figure S18.** <sup>19</sup>F NMR spectrum of 2,2,2-trifluoro-1-[5-(naphthalen-2-yl)pyrrol-2-yl]ethan-1-ol (**2**) in CDCl<sub>3</sub>.



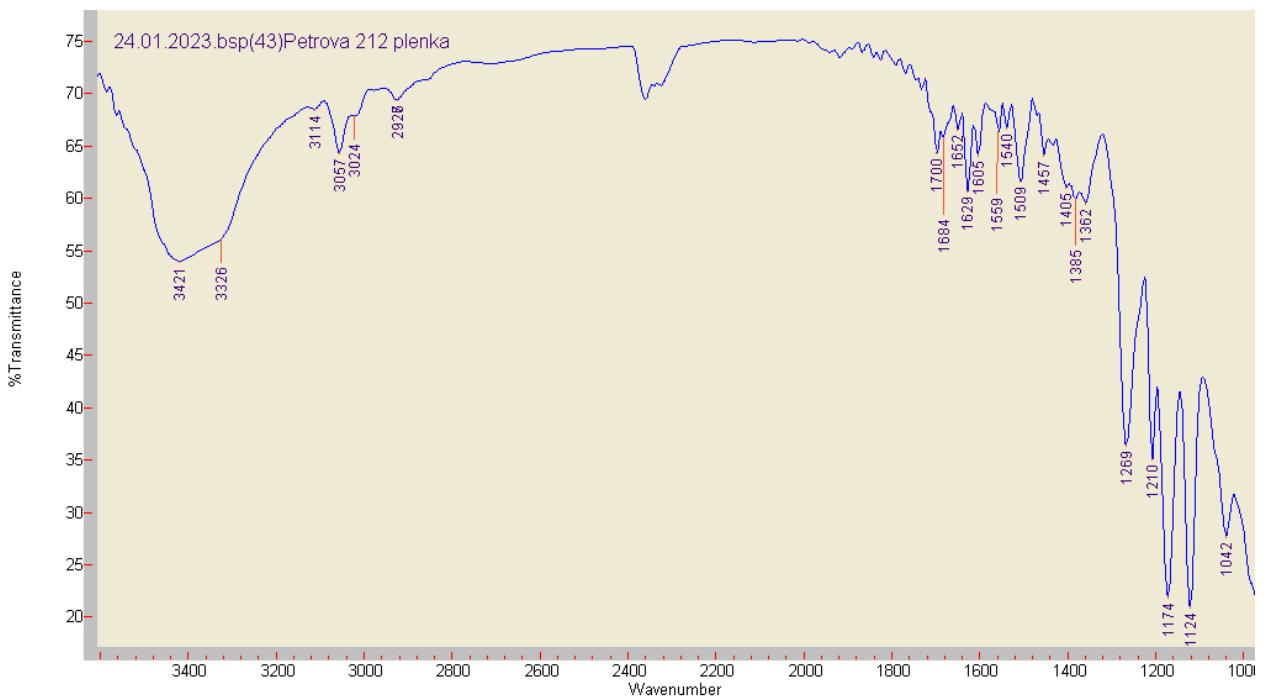
**Figure S19.** 2D <sup>1</sup>H-<sup>15</sup>N HMBC spectrum of 2,2,2-trifluoro-1-[5-(naphthalen-2-yl)pyrrol-2-yl]ethan-1-ol (**2**) (CDCl<sub>3</sub>)



**Figure S20.** 2D COSY spectrum of 2,2,2-trifluoro-1-[5-(naphthalen-2-yl)pyrrol-2-yl]ethan-1-ol (**2**) (CDCl<sub>3</sub>)



**Figure S21.** 2D NOESY spectrum of 2,2,2-trifluoro-1-[5-(naphthalen-2-yl)pyrrol-2-yl]ethan-1-ol (**2**) ( $\text{CDCl}_3$ )



**Figure S22.** IR spectrum of 2,2,2-trifluoro-1-[5-(naphthalen-2-yl)pyrrol-2-yl]ethan-1-ol (**2**) (film).