

## Supporting Information

### **New Catalytic Method for the Synthesis of 2,7-Dicycloalkyl-hexaazaperhydropyrenes**

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Figure 3:  $^1\text{H}$  NMR spectra of compound **2**.

Figure 4:  $^{13}\text{C}$  NMR spectra of compound **2**.

Figure 5:  $^1\text{H}$  NMR spectra of compound **3**.

Figure 6:  $^{13}\text{C}$  NMR spectra of compound **3**.

Figure 7:  $^1\text{H}$  NMR spectra of compound **5**.

Figure 8:  $^{13}\text{C}$  NMR spectra of compound **5**.

Figure 9:  $^1\text{H}$  NMR spectra of compound **6**.

Figure 10:  $^{13}\text{C}$  NMR spectra of compound **6**.

Figure 11:  $^1\text{H}$  NMR spectra of compound **7**.

Figure 12:  $^{13}\text{C}$  NMR spectra of compound **7**.

Figure 13:  $^1\text{H}$  NMR spectra of compound **8**.

Figure 14:  $^{13}\text{C}$  NMR spectra of compound **8**.

## 2,7-Dicyclopropyl-2,3a,5a,7,8a,10a-hexaazaperhydropyrene (2)

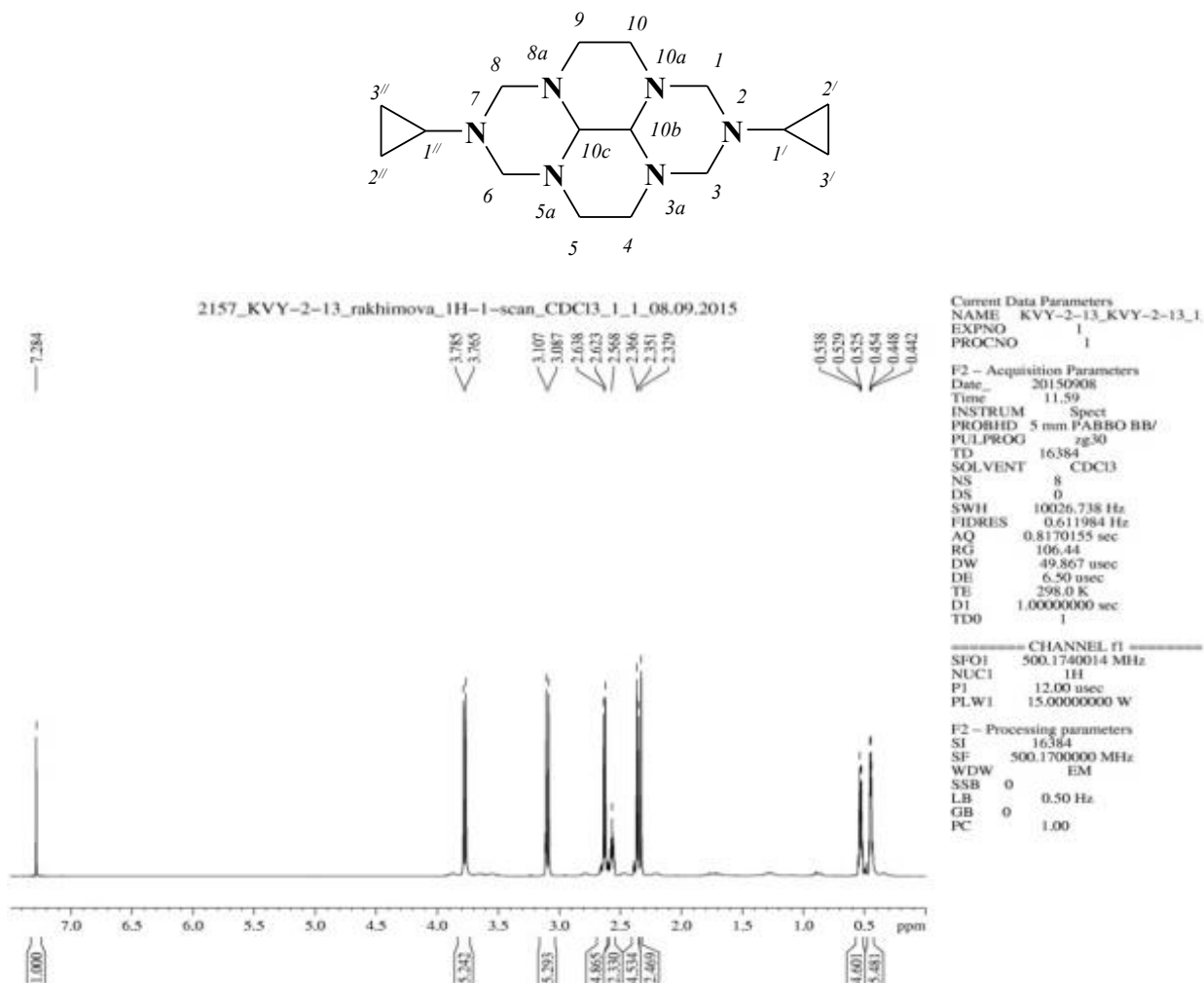


Figure 3: <sup>1</sup>H NMR spectra of compound 2.

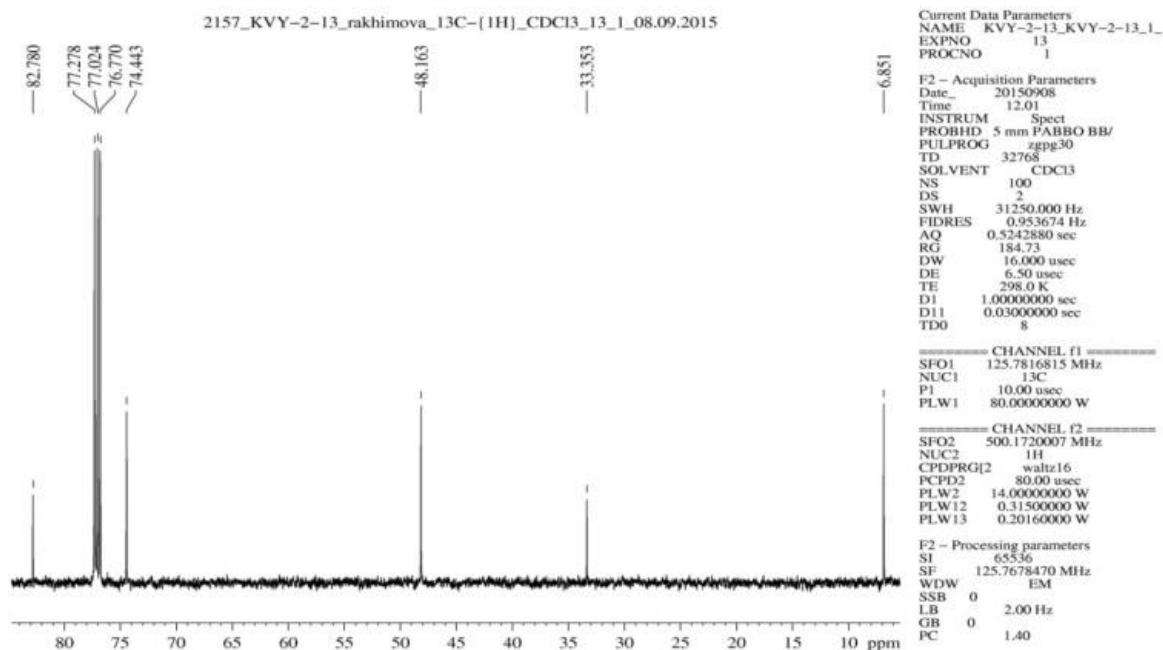


Figure 4: <sup>13</sup>C NMR spectra of compound 2.

## 2,7-Dicyclopentyl-2,3a,5a,7,8a,10a-hexaazaperhydropyrene (3)

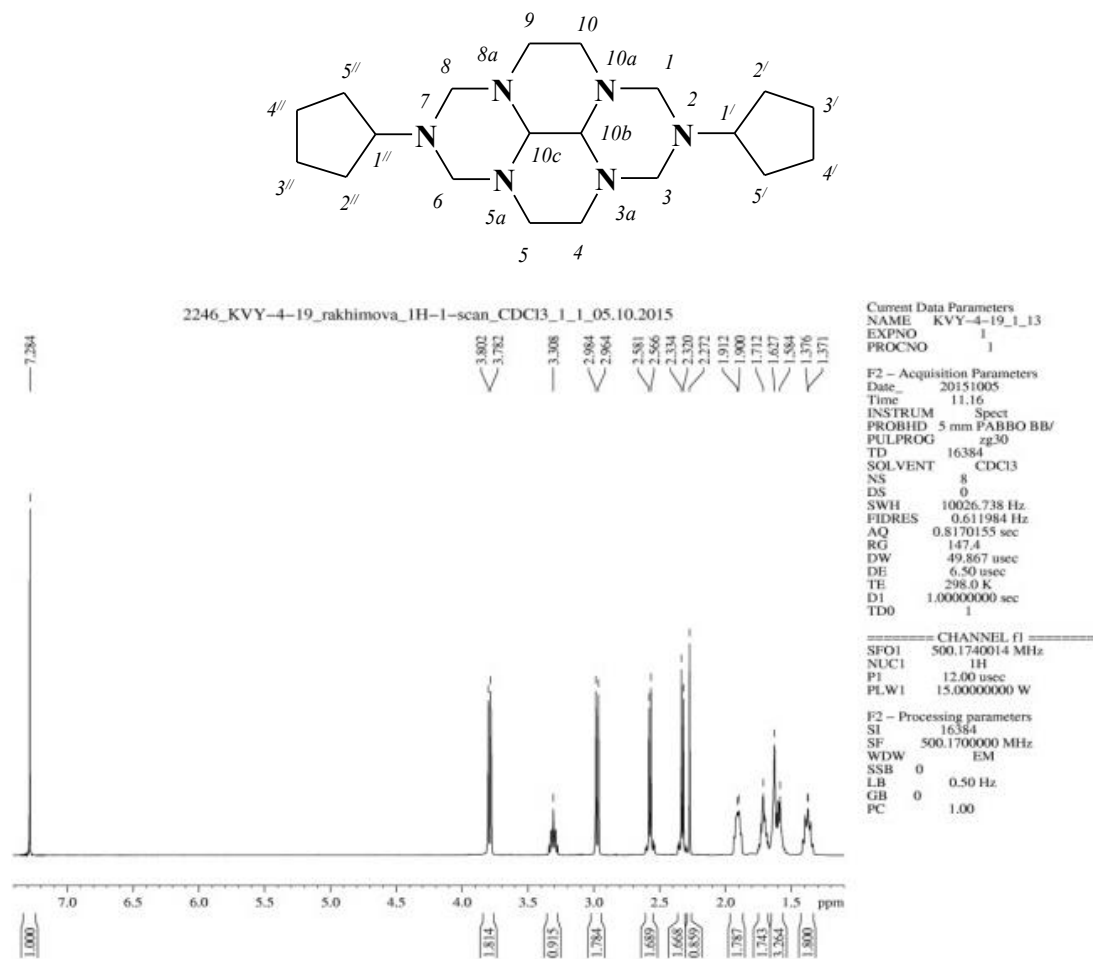


Figure 5:  $^1\text{H}$  NMR spectra of compound **3**.

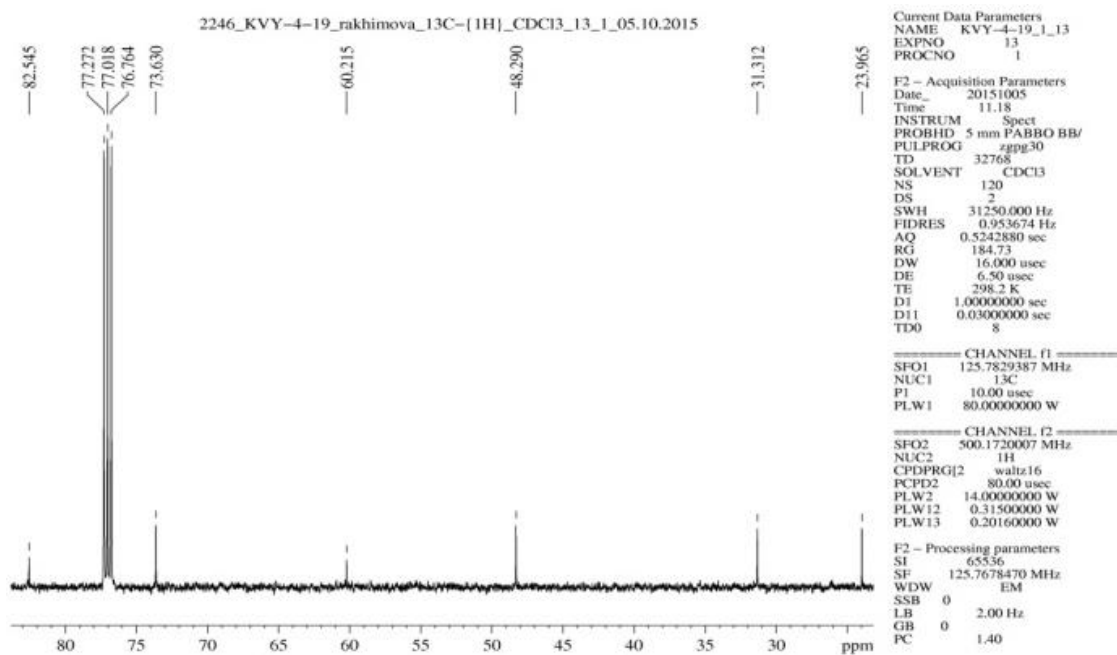


Figure 6:  $^{13}\text{C}$  NMR spectra of compound **3**.

## 2,7-Ditetrahydropyran-4-yl-2,3a,5a,7,8a,10a-hexaazaperhydropyrene (5)

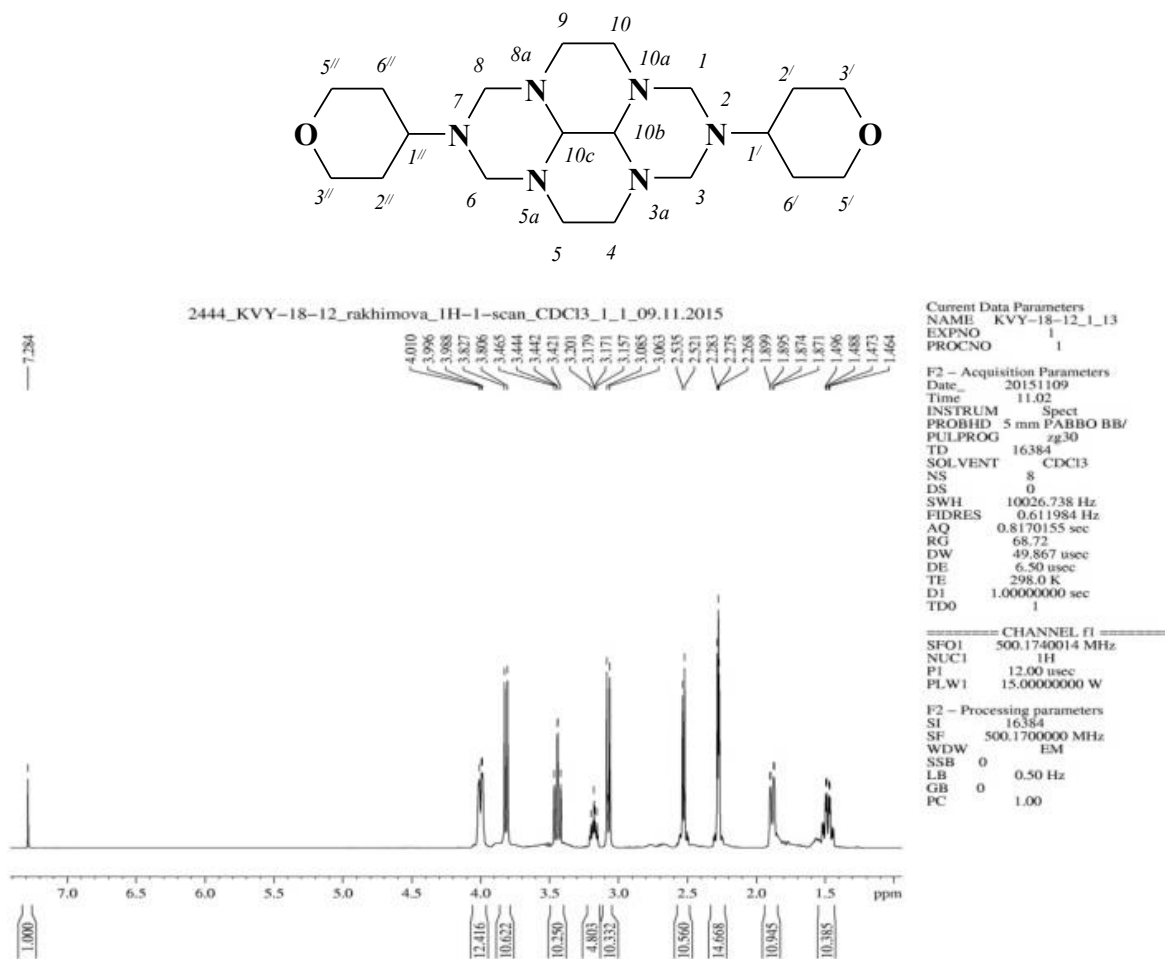


Figure 7: <sup>1</sup>H NMR spectra of compound 5.

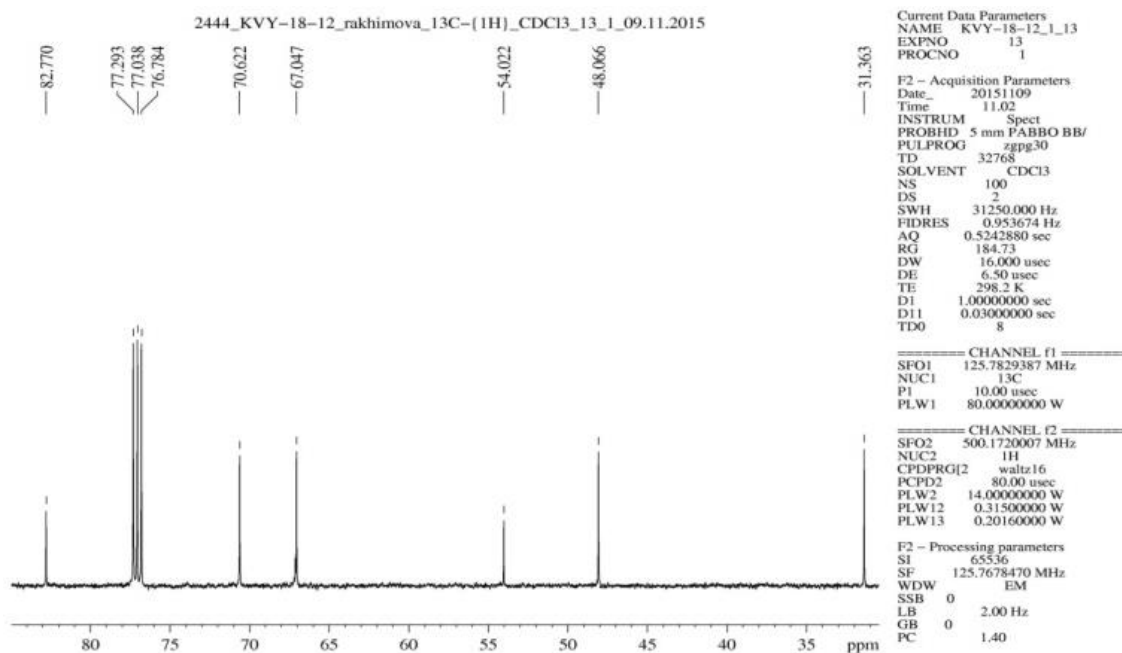


Figure 8: <sup>13</sup>C NMR spectra of compound 5.

## 2,7-Dicycloheptyl-2,3a,5a,7,8a,10a-hexaazaperhydropyrene (6)

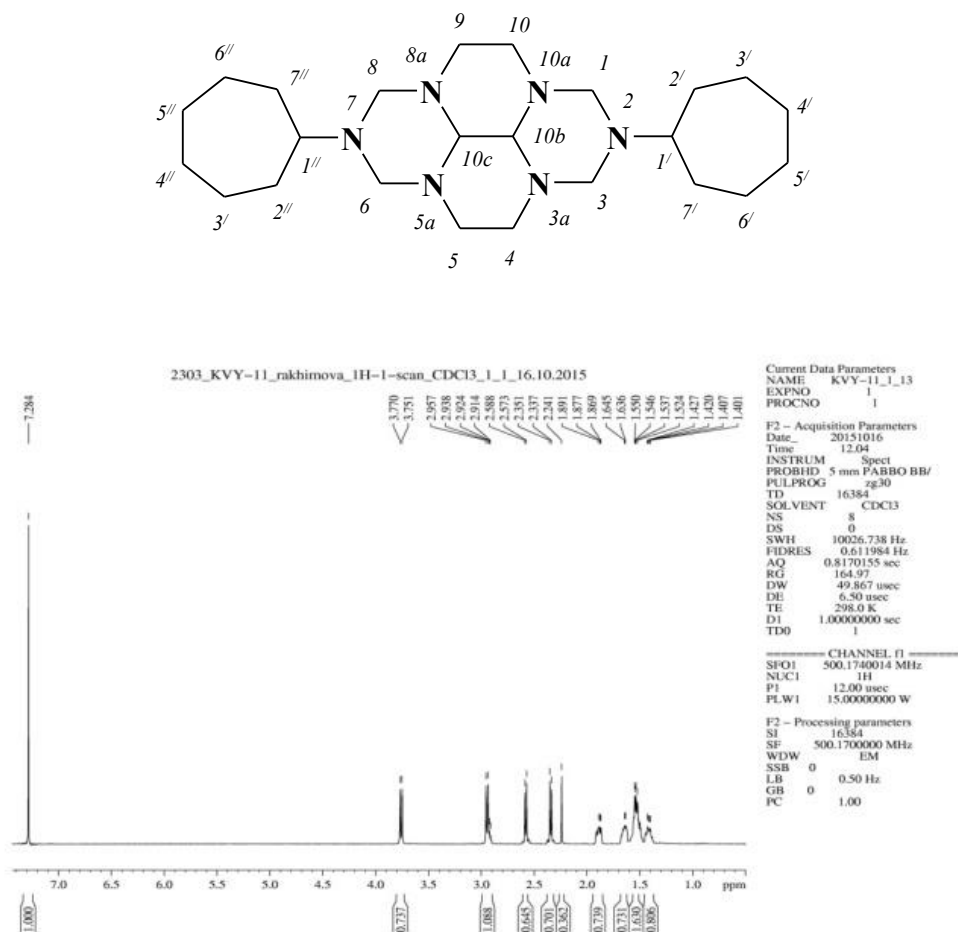


Figure 9: <sup>1</sup>H NMR spectra of compound 6.

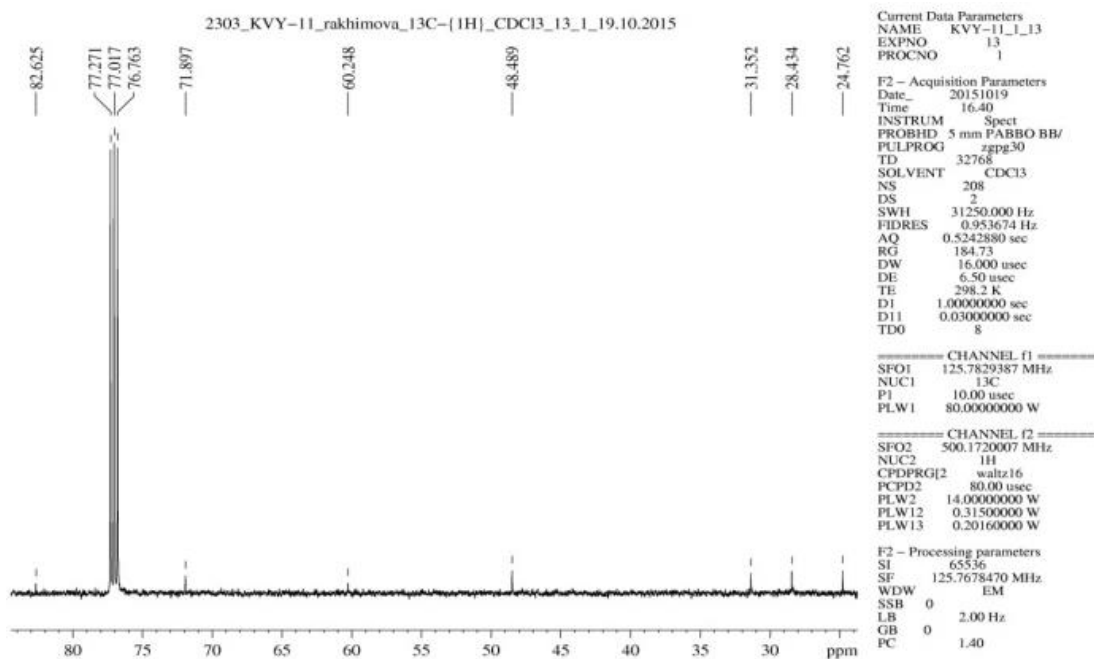


Figure 10: <sup>13</sup>C NMR spectra of compound 6.

## 2,7-Dicyclooctyl-2,3a,5a,7,8a,10a-hexaazaperhydropyrene (7)

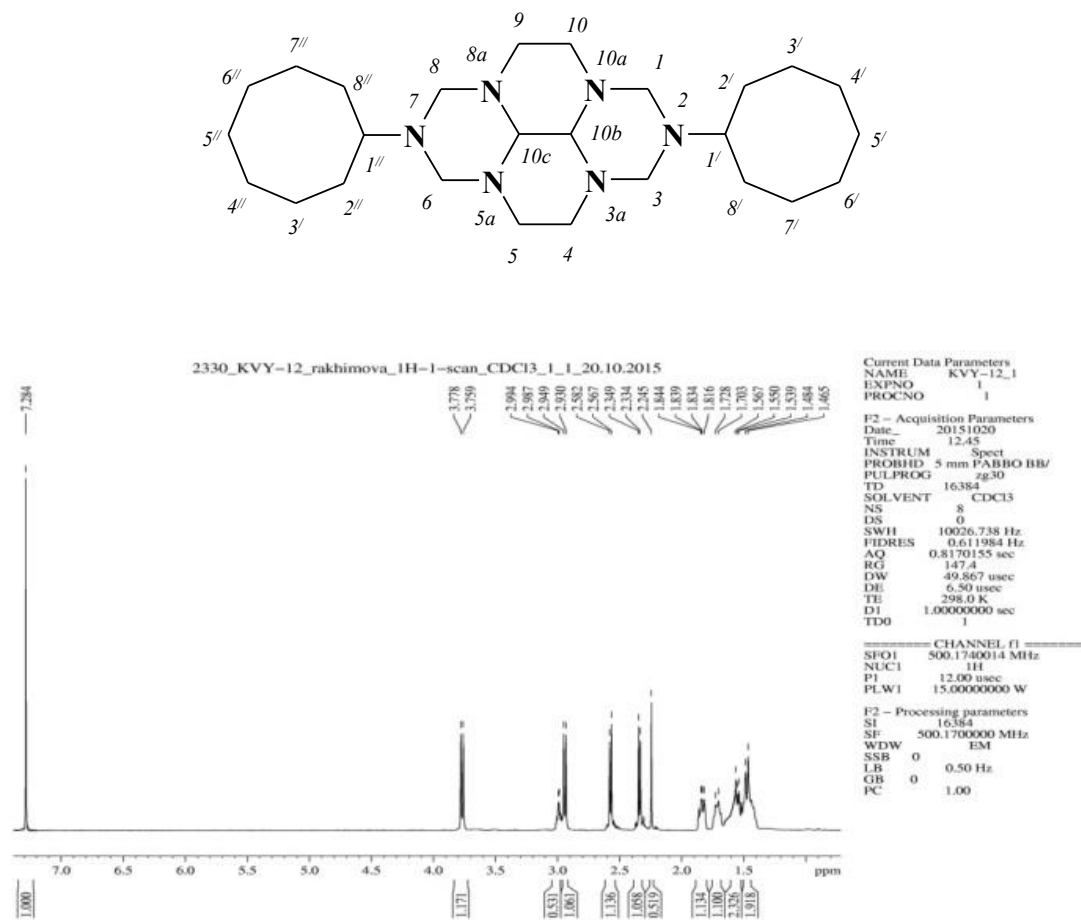


Figure 11:  $^1\text{H}$  NMR spectra of compound 7.

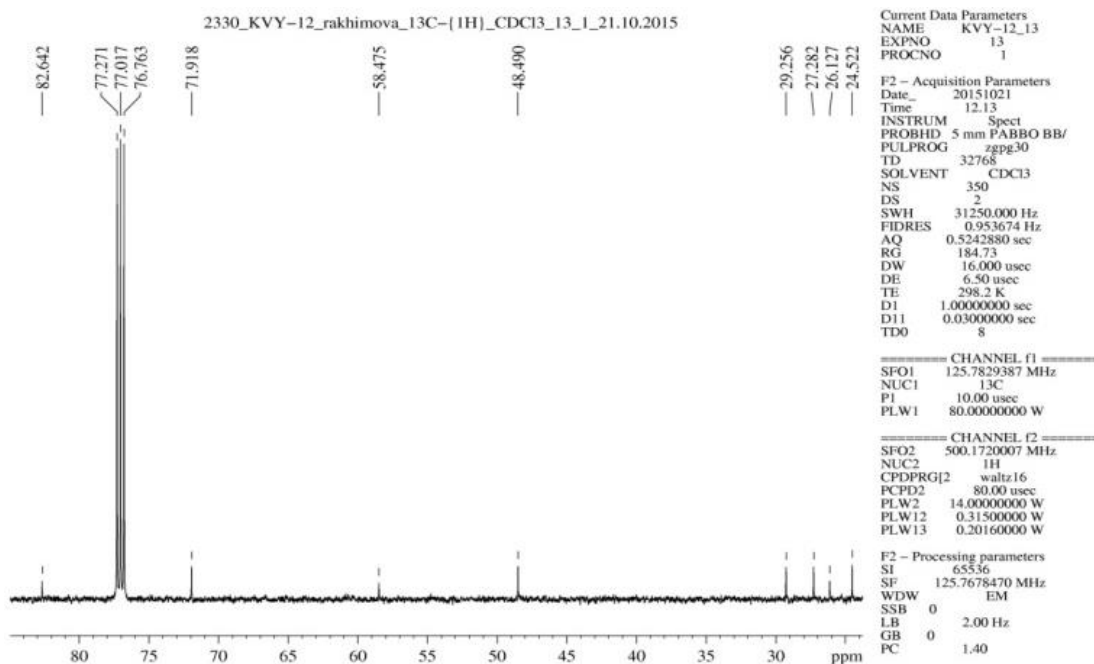


Figure 12:  $^{13}\text{C}$  NMR spectra of compound 7.

## 2,7-Dibi[2.2.1]hept-2-yl-2,3a,5a,7,8a,10a-hexaazaperhydropyrene (8)

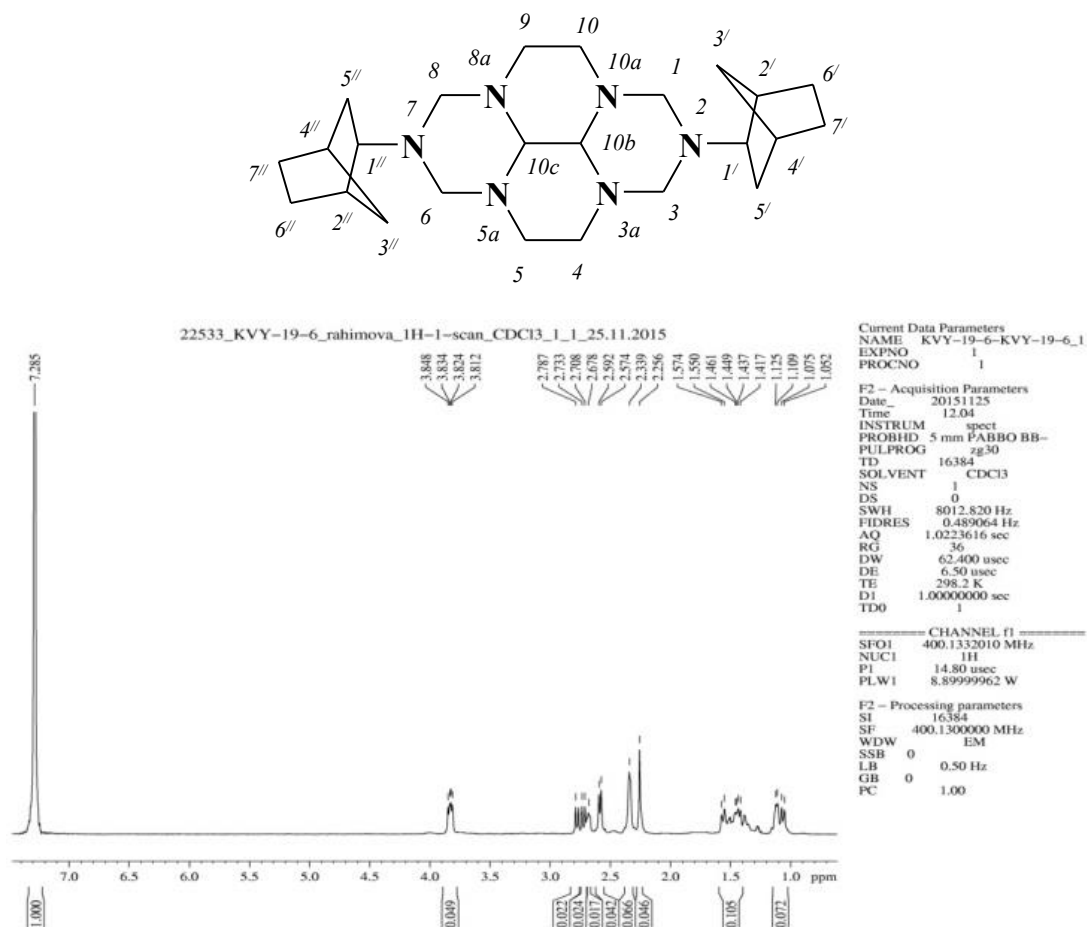


Figure 13:  $^1\text{H}$  NMR spectra of compound 8.

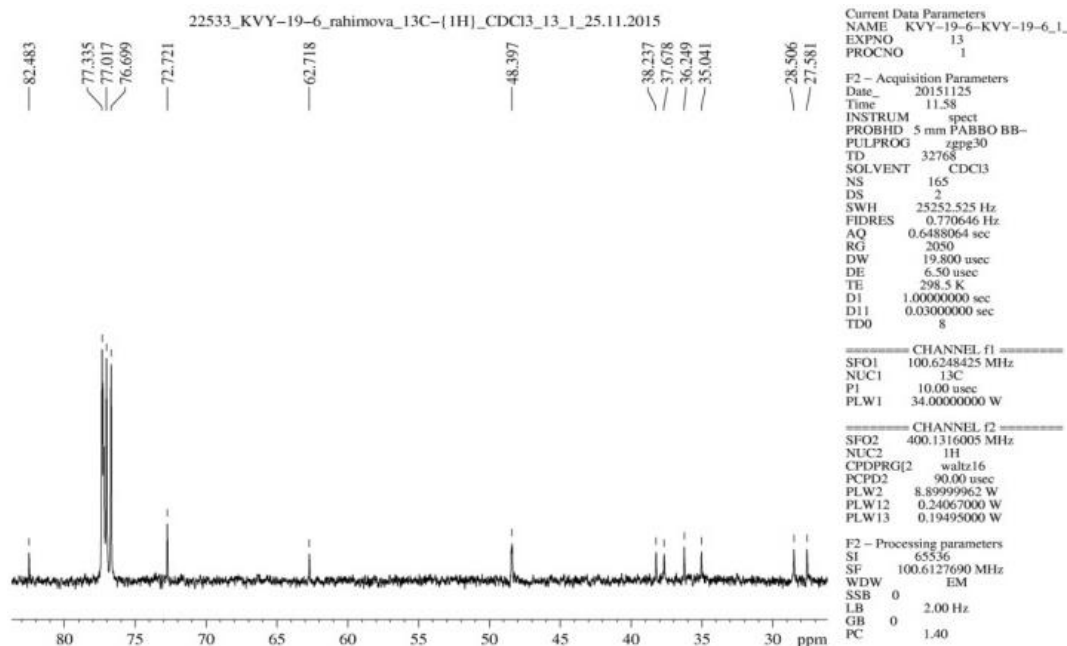


Figure 14:  $^{13}\text{C}$  NMR spectra of compound 8.