## Spectral Data for:

Convergent and Diastereoselective Synthesis of the Polycyclic Pyran Core of Saudin





Figure A2 Infrared spectrum (KBr pellet) of compound 9.



*Figure A3*  $^{13}$ C NMR (75 MHz, DMSO- $d_6$ ) of compound **9**.







Figure A5 Infrared spectrum (thin film/NaCl) of compound 5a.



*Figure A6*  $^{13}$ C NMR (75 MHz, CDCl<sub>3</sub>) of compound **5a**.





Figure A8 Infrared spectrum (thin film/NaCl) of compound 5b.



*Figure A9*  $^{13}$ C NMR (75 MHz, CDCl<sub>3</sub>) of compound **5b**.







Figure A11 Infrared spectrum (thin film/NaCl) of compound 5c.



*Figure A12*  $^{13}$ C NMR (75 MHz, CDCl<sub>3</sub>) of compound **5**c.





*Figure A14* Infrared spectrum (thin film/NaCl) of compound **6a**.



*Figure A15*  $^{13}$ C NMR (75 MHz, CDCl<sub>3</sub>) of compound **6a**.



*Figure A16* <sup>1</sup>H NMR (300 MHz, CDCl<sub>3</sub>) of compound **6b**.



Figure A17 Infrared spectrum (thin film/NaCl) of compound 6b.



*Figure A18*<sup>-13</sup>C NMR (75 MHz, CDCl<sub>3</sub>) of compound **6b**.





Figure A20 Infrared spectrum (thin film/NaCl) of compound 6c.



*Figure A21* <sup>13</sup>C NMR (75 MHz,  $C_6D_6$ ) of compound **6c**.





Figure A23 Infrared spectrum (thin film/NaCl) of compound 16.



*Figure A24*  $^{13}$ C NMR (75 MHz, CDCl<sub>3</sub>) of compound **16**.





Figure A26 Infrared spectrum (thin film/NaCl) of compound 3.



*Figure A27*  $^{13}$ C NMR (75 MHz, CDCl<sub>3</sub>) of compound **3**.





Figure A29 Infrared spectrum (thin film/NaCl) of compound 19a.



*Figure A30*  $^{13}$ C NMR (125 MHz, C<sub>6</sub>D<sub>6</sub>) of compound **19a**.





Figure A32 Infrared spectrum (thin film/NaCl) of compound 19b.



*Figure A33*  $^{13}$ C NMR (125 MHz, C<sub>6</sub>D<sub>6</sub>) of compound **19b**.





Figure A35 Infrared spectrum (thin film/NaCl) of compound 21(1).



*Figure A36*  $^{13}$ C NMR (125 MHz, C<sub>6</sub>D<sub>6</sub>) of compound **21(1)**.





Figure A38 Infrared spectrum (thin film/NaCl) of compound 21(2).



*Figure A39*  $^{13}$ C NMR (125 MHz, C<sub>6</sub>D<sub>6</sub>) of compound **21(2)**.





Figure A41 Infrared spectrum (thin film/NaCl) of compound 23.



*Figure A42*  $^{13}$ C NMR (125 MHz, C<sub>6</sub>D<sub>6</sub>) of compound **23**.





Figure A44 Infrared spectrum (thin film/NaCl) of compound 32.



*Figure A45* <sup>13</sup>C NMR (75 MHz, CDCl<sub>3</sub>) of compound **32**.





Figure A47 Infrared spectrum (thin film/NaCl) of compound 35.



*Figure A48*<sup>-13</sup>C NMR (75 MHz, CDCl<sub>3</sub>) of compound **35**.





*Figure A50* Infrared spectrum (thin film/NaCl) of compound **37**.



*Figure A51* <sup>13</sup>C NMR (75 MHz, CDCl<sub>3</sub>) of compound **37**.

![](_page_35_Figure_0.jpeg)

![](_page_36_Figure_1.jpeg)

Figure A53 Infrared spectrum (thin film/NaCl) of compound 28.

![](_page_36_Figure_3.jpeg)

*Figure A54*  $^{13}$ C NMR (75 MHz, C<sub>6</sub>D<sub>6</sub>) of compound **28**.

![](_page_37_Figure_0.jpeg)

![](_page_38_Figure_1.jpeg)

Figure A56 Infrared spectrum (thin film/NaCl) of compound 29.

![](_page_38_Figure_3.jpeg)

*Figure A57*  $^{13}$ C NMR (75 MHz, C<sub>6</sub>D<sub>6</sub>) of compound **29**.

![](_page_39_Figure_0.jpeg)

![](_page_40_Figure_1.jpeg)

Figure A59 Infrared spectrum (thin film/NaCl) of compound 30.

![](_page_40_Figure_3.jpeg)

*Figure A60*  $^{13}$ C NMR (75 MHz, C<sub>6</sub>D<sub>6</sub>) of compound **30**.

![](_page_41_Figure_0.jpeg)

![](_page_42_Figure_1.jpeg)

Figure A62 Infrared spectrum (thin film/NaCl) of compound 24a.

![](_page_42_Figure_3.jpeg)

*Figure A63*  $^{13}$ C NMR (75 MHz, CDCl<sub>3</sub>) of compound **24a**.

![](_page_43_Figure_0.jpeg)

![](_page_44_Figure_1.jpeg)

Figure A65 Infrared spectrum (thinfilm/NaCl) of compound 24b(1).

![](_page_44_Figure_3.jpeg)

*Figure A66*  $^{13}$ C NMR (125 MHz, C<sub>6</sub>D<sub>6</sub>) of compound **24b(1)**.

![](_page_45_Figure_0.jpeg)

![](_page_46_Figure_1.jpeg)

Figure A68 Infrared spectrum (thinfilm/NaCl) of compound 24b(2).

![](_page_46_Figure_3.jpeg)

*Figure A69*  $^{13}$ C NMR (125 MHz, C<sub>6</sub>D<sub>6</sub>) of compound **24b(2**).

![](_page_47_Figure_0.jpeg)

![](_page_48_Figure_1.jpeg)

Figure A71 Infrared spectrum (thin film/NaCl) of compound 24c.

![](_page_48_Figure_3.jpeg)

*Figure A72*  $^{13}$ C NMR (75 MHz, C<sub>6</sub>D<sub>6</sub>) of compound **24c**.

![](_page_49_Figure_0.jpeg)

![](_page_50_Figure_1.jpeg)

Figure A74 Infrared spectrum (thin film/NaCl) of compound 38.

![](_page_50_Figure_3.jpeg)

*Figure A75*  $^{13}$ C NMR (75 MHz, C<sub>6</sub>D<sub>6</sub>) of compound **38**.

![](_page_51_Figure_0.jpeg)

![](_page_52_Figure_1.jpeg)

Figure A77 Infrared spectrum (thin film/NaCl) of compound 42.

![](_page_52_Figure_3.jpeg)

*Figure A78* <sup>13</sup>C NMR (125 MHz, CDCl<sub>3</sub>) of compound **42**.

![](_page_53_Figure_0.jpeg)

![](_page_54_Figure_1.jpeg)

Figure A80 Infrared spectrum (film) of compound 43.

![](_page_54_Figure_3.jpeg)

*Figure A81*  $^{13}$ C NMR (75 MHz, C<sub>6</sub>D<sub>6</sub>) of compound **43**.