- ➤ Jaccard/Tanimoto coefficient → similarity/diversity
- ➤ Jaccard-Tanimoto similarity coefficient → similarity/diversity (Table S9)
- **▶ Jenkins steric parameter** → steric descriptors
- ightharpoonup  $J_p$  statistics  $\rightarrow$  regression parameters
- $ightharpoonup J_t index 
  ightarrow Balaban distance connectivity index$
- $\triangleright$  J'/J index → bond order indices (⊙ graphical bond order)
- **▶ JJ indices** → Wiener matrix
- **▶ Jochum–Gasteiger canonical numbering** → canonical numbering
- **▶ Joint Entropy-based Diversity Analysis** → cell-based methods
- **> joint entropy** → information content

## **■** Joshi electronic descriptors

These are molecular  $\rightarrow$  *electronic descriptors* assuming that the minimum energy conformation of a molecule represents the optimal picture of the electronic charge distribution in the whole molecule [Joshi, Meister *et al.*, 1993, 1994].

The Joshi electronic descriptors (JS1-JS5) are defined as

$$JS1 = \frac{E_R}{E_H} \qquad JS2 = \frac{E_R - E_H}{E_H} \qquad JS3 = \frac{E_R - E_{HS}}{E_H}$$

$$JS4 = \frac{E_R - \sum_j E_{R_j}}{E_H} \qquad JS5 = \frac{E_R - \sum_j E_{R_j} - E_{HS}}{E_H}$$

where E is the  $\Delta H_f$  conformational energy value of the global minimum energy conformer calculated by  $\rightarrow$  computational chemistry (AM1) methods. The subscripts R, H, and HS refer to a R-substituted compound, the unsubstituted compound, and a compound for which the aromatic moiety is unsubstituted but the side chain is substituted in a similar way.  $E_{Rj}$  is the energy contribution due to the formation of the jth substituent group calculated by subtracting the energy value of methane from that of the corresponding substituted methane. The summation in JS4 and JS5 depends on the series of studied compounds.

- **▶ Joshi steric descriptor** → steric descriptors
- **> Julg–François index** → delocalization degree indices

Molecular Descriptors for Chemoinformatics, Volume I: Alphabetical Listing Roberto Todeschini and Viviana Consonni Copyright © 2009 WILEY-VCH Verlag GmbH & Co. KGaA, Weinheim ISBN: 978-3-527-31852-0

## 426 Jurs cost function

- Jurs cost function → regression parameters
   Jurs shape indices ≡ shadow indices